

XUM

AMERICAN JOURNAL OF ARCHÆOLOGY.

Vol. VI.

SEPTEMBER, 1890.

No. 3.

THE HOUSE OF THE MARTYRS JOHN AND PAUL RECENTLY DISCOVERED ON THE COELIAN HILL AT ROME.*

[PLATES XVI, XVII.]

Of the many Christian monuments discovered during this century, especially in Rome, one of the most notable and precious, in the opinion of specialists, is the house, on the Coelian, of the saints John and Paul who suffered martyrdom under Julian the Apostate. It is now over three years since it began to come to light, through excavations made under my supervision, and since then its fame has been published everywhere.¹ This fame is not surprising, for the house of John and Paul, made sacred through their martyrdom and from the *confessio* erected there a few years after their death, is a monument unique both in Rome and elsewhere. In other cases, the early work has been more or less obliterated by mediæval restoration or decoration. But this monument preserves its original style and is, even now, almost as entire in its lower part as when the two martyrs lived in it and entertained devout pilgrims at the close of the fourth century.

* Translated from the Italian ms. by A. L. Frothingham, Jr.

¹ GATTI, *Bullettino della Comm. arch. com. di Roma*, 1887, pp. 151 sqq., 321 sqq.; DE ROSSI, *Bullettino di Archeologia Cristiana*, 1888-89, pp. 68 sqq., 89 sqq.; ARMELLINI, *Cronachetta*, Dec., Feb., 1888, April, May, June, 1889; LE BLANT, *Revue Archéologique*, 1889, p. 16, and *Acad. des inscriptions et belles-lettres*, Dec., 1887, pp. 466-71; ALLARD, *La science catholique*, Feb., 1888, pp. 177-90; BARING-GOULD, *Newberry House Magazine*, Aug. and Sept., 1889, pp. 165-76, 287-92; *Am. Journal of Archaeology*, vol. III, pp. 481-2; IV, pp. 115, 455-6. There have also been notices in the *Bulletin Critique*, the *Civiltà Cattolica*, the *Römische Quartalschrift*, the *Bulletin of the University of Innsbruck*, etc., etc. : not to mention numerous paragraphs in daily newspapers.

This discovery having therefore excited so much interest, it appears as if the time had come for me to give a full and detailed description of what has hitherto been discovered, thus completing the fragmentary notices I have from time to time published in various periodicals, and answering the expectation of many who have been eagerly awaiting the publication of the monument.

I. THE MONUMENTS OF THE COELIAN.

The Coelian hill of the Eternal City, though now a desert, was in Roman times closely peopled, and was called by Frontinus (*De Aquaeduct.*, II. 87) a famous hill: *Coelius et Aventinus celeberrimi colles*. When Augustus divided the city into fourteen *regiones*, the second was comprised in the Coelian, and on it, from the beginning, the most select portion of the Roman patricians had come to dwell. As I am about to describe a large and magnificent house in this *regio*, it may be well to first take a glance at the entire hill and its principal monuments and thus become better able to estimate what place among them was held by the house of John and Paul. It happens that no part of Rome has been so little studied or explored. Yet, there is no lack of records regarding it: there are enough of them in the classics, in the regional catalogues, and in monuments dispersed here and there, to furnish the basis of a successful study.

The hill extends from west to east in a long sinuous line between the Esquiline, the Palatine, the false Aventine, and the walls, with a circuit of between 1200 and 1300 feet. Nearly all the present streets of its inhabited section follow the lines of the ancient streets. They branch off from two main trunks, the street now called *Via dei SS. Giovanni e Paolo* and *San Stefano*, and the *Via dei SS. Quattro Coronati*. They cross the *regio* from end to end and converge before the Lateran hospital, where the ancient line of the Servian wall passed, and where, in the opinion of many, was situated the *Porta Coelimon-tana* mentioned by Cicero and Livy.² The street of SS. Giovanni e Paolo, which skirts the south wall of the house of these martyrs, was called, by S. Gregory, *Clivus Scauri*.³ No ancient writer mentions such a street, but we know of this Scaurus M. Aemilius from Cicero,⁴ and from Asconius,⁵ who says that he had a house on the Palatine. He

² CICERO, in *Pison.*, ch. XXIII; LIVIUS, *Histor.*, lib. XXXIV. ch. 9; JORDAN, *Topograp.*, II; PRELLER, *Die Region*.

³ *Epist. XIII, Candido Ab.*, lib. VII.

⁴ *Orat. pro M. Aem. Scauro*.

⁵ *Comm. in orat. cit.*; MAZOUIS, *Le palais de Scaurus*.

may have paved the street which then took its name from him. On the left side of the street, one of the façades of the house of the martyrs still stands almost intact with its portico and two stories of windows.

In the topographic catalogues we find distinct mention, on the Coelian, of the *Caput Africae*, the *Antrum Cyclopis*, the *Arbor Sancta*, the *Lupanarii* and the *Tabernola*:⁶ all these are certainly names of quarters or *vici*, but we are unable to identify them.⁷ In the *Caput Africae*, near the house of John and Paul, was situated the *Paedagogium puerorum Caesaris*, famous in many inscriptions,⁸ in which the imperial pages were educated for the various offices they were to hold.⁹

In the greater part of the higher streets of the Coelian, the rubbish from public and private buildings has but little raised the level of the soil, at least since the third century. Around the house of the martyrs the level is about the same as it was then, especially on the western side in the present botanical garden, where I have discovered, at a depth of only two decimeters, an external brick-pavement *a spina* and another internal mosaic-pavement, and, at a depth of 1.50 met., the virgin tufa.

The smiling slopes of the Coelian were adorned with many a rich temple and sacred shrine: such were the temple of Jupiter¹⁰ distinguished by the epithet *Coelimontanus*; ¹¹ that of *Minerva Capita*; ¹²

⁶ URLICH, *Codex Urbis topographicus*, p. 2 sqq.

⁷ In regard to the *Caput Africae*, the excellent dissertation of Professor GATTI should be consulted in the *Annali dell' Istituto*, 1882, p. 192 sqq.; for the *Vicus ab Cyclopis*, consult GRUTER, p. DCXXI, No. 1.

⁸ *CIL*, VI, 5354, 5563, 7767, 8968, 8977, 8981, 8984, 8987, etc.

⁹ DE ROSSI, *Roma Sotterranea*, III, p. 292.

If Professor Gatti be not mistaken in finding the exact site of the *Paedagogium* in the present field of the Passionists, it is quite possible that we have the design of this important building in one of the fragments of the Capitoline plan. Long study and careful comparison have convinced me that the fragment on which is drawn the Neronian aqueduct with the title *AQVEDVCTIVM* (JORDAN, *Forma Urbis Romae*, tav. x, No. 45) belongs to this part of the Coelian. Now, between the now-destroyed street of the *Navicella* and this aqueduct, where Gatti places the *Paedagogium* and where in fact was found the large base (now in the Capitol), with the dedication to Caracalla by the pedagogues of the *Caput Africae* (*CIL*, VI, 1052; FABRETTI, *Inscr.*, p. 296, No. 257; GATTI, *loc. cit.*), we see drawn a group of buildings which do not resemble either private houses or public monuments, but seem, on the other hand, to be well suited to a *gymnasium* such as was the *Paedagogium* on the Coelian (see PL. XVI).

¹⁰ MARTIALIS, *Epigr.*, lib. VII, 15.

¹¹ GATTI, *Bull. Comm. arch.*, 1887, p. 314.

¹² OVIDIUS, *Fast.*, lib. III, v. 857.

that of *Hercules Victor*; ¹³ that of Isis, ¹⁴ of the goddess Carna who presided over the guarding of the city-gates; ¹⁵ the shrine of Diana in the Coeliolus, ¹⁶ called by Cicero *maximum et sanctissimum*, ¹⁷ and many others, among which the temple of Claudius stands preëminent for position, size, and magnificence.

The secular rivalled the sacred buildings in number and splendor: such were the *stadia* for the circus and other games, of which the most noted were the *ludus matutinus*, the *gallicus* and the *dacicus*; ¹⁸ the martial field for the feast of the *equivia*; ¹⁹ the *mica aurea* for great banquets; ²⁰ the *thermae*; ²¹ the *tholus Caesareus* ²² or market of Augustus, one of the two great market-places founded in Rome as early as the first century, ²³ and many other similar buildings that it would be useless to enumerate. We have not retained a record of all the private houses on the Coelian, which are said to have numbered a hundred and twenty-seven, ²⁴ without counting the far larger number that were joined together so as to form distinct groups or *insulae*. ²⁵ Nevertheless, we can still, from the little we know, form an idea of the wealth of this hill in this respect. Julius Capitolinus is authority for the fact, that here was the palace of Verus, where Marcus Aurelius was born and educated. ²⁶ This prince so loved the Coelian that he would playfully call it "my hill:" *Mons meus Coelius*. ²⁷ Next to this palace were the *aedes Laterani* ²⁸ of the Plautius Lateranus who on his election to the consulate became an accomplice in the famous Pisonian conspiracy against Nero. ²⁹ Perhaps the Lateran basilica afterward rose on the site of this house. ³⁰

¹³ MARINI, *Arvali*, I, tav. 3, p. 30. ¹⁴ TREBELLII POLLIO, in *Tetrico jun.*, cap. 24.

¹⁵ MACROBIUS, *Saturnal.*, lib. I, c. 12.

¹⁶ CICERO, *Orat. pro Arusp. respons.*, cap. 11.

¹⁷ *Ibidem*.

¹⁸ MURATORI, *Inscript.*, p. DCXX, No. 2, p. CCCLVIII; GRUTER, p. CCCXXXV; ORELLI, p. 2554; SÜETONIUS, in *Domitiano*, c. III.

¹⁹ PAULUS, in *Festo*, lib. XI; OVIDIUS, *Fast.*, lib. III, v. 519 sqq.; CATULLUS, LV. 3; FESTUS, in *Equivia*.

²⁰ MARTIALIS, *Epigr.*, lib. III. 55.

²¹ CIAMPINI, *Cod. Vat.*, 7849; DE ROSSI, *Bullettino*, v, p. 60; LANCIANI, *I commentari di Frontino*, p. 159; VACCA, *Memorie*, 22.

²² MARTIALIS, *loc. cit.*

²³ DION CASSIUS, lib. LXI, c. 18; ECKEL, *Doctrina num. vet.*, No. VI, p. 373.

²⁴ *Curioeum Urbis*; *Notitia*; ULRICH, *op. cit.*, p. 2, sqq.

²⁵ *Ibidem*.

²⁶ In *M. Antonino*, cap. I.

²⁷ *Epist. I Frontoni*, l. 2.

²⁸ JULIUS CAPITOL., *loc. cit.*

²⁹ TACITUS, *Annal.*, lib. VI, cc. 49, 60; AURELIUS VICTOR, *Epist.*, c. 20.

³⁰ For the remains of the *Aedes Laterani*, consult VACCA, *Memorie*, §120; BLONDI, *Roma restaur.*, lib. I, No. 85; NIBBY-NARDINI, I, p. 210; VENUTI, *Roma antica*, lib. I, 8; and the reports on the recent excavations made during the reconstruction of the apse of the Lateran Basilica.

The emperor Philip also resided on the Coelian, whom Eusebios asserts to have been converted to the true faith by his wife Martia Oracilia Severa, who openly professed Christianity.³¹ Pliny speaks of a Mamurra, a Roman *equus* and prefect of the blacksmiths of C. Cæsar in Gaul, who dwelt in *Coelimonte* and, following Cornelius Nepos, he makes a minute description of his palace, saying that all its walls were covered with marbles, and that it was ornamented with heavy columns of finest marble; and he adds that this was the first Roman house in which such marble incrustations were used.³² A leaden pipe belonging to this house was found not long since with the inscription: VILL. MAMVRRANAE. Cicero and Valerius speak of the *aedes* of one Claudius Centimalis on the Coelian.³³ That of Junius Senator is mentioned by Tacitus, who says that, when the *regio* was burned, only a statue of Tiberius which was within this building remained uninjured.³⁴ Lampridius and Julius Capitolinus refer to the *aedes Vectiliana ad Coelum montem*, in which the unfortunate Emperor Commodus sought refuge and was killed by Narcissus at the instigation of Martia.³⁵ Most notable for its historic associations was the house of the Tetrici, called by Trebellius Pollio a *domus pulcherrima*.³⁶ It was situated in *monte Coelio inter duos lucos*, opposite the temple of Isis.³⁷ The story of the two Tetrici, C. Pesuvius and his son, was represented, says the above historian, in a beautiful painting which, in his time, was still to be seen in the house. C. Pesuvius was one of the thirty tyrants who arose in the reign of Gallienus.³⁸ In the *regiones* of Panvinio³⁹ we find, registered on the Coelian, the house of the Parthians, *domus septem Parthorum*, perhaps the dwelling of those princes that were sent from Parthia to Rome as hostages, according to Tacitus. The exact location of all these houses is quite unknown to us. So it is with the house of the poet Stella, of Caesar, of the hymn-writer Claudius Clippus (all mentioned by Panvinio), with that of the prefect Symmachus, of which he himself speaks in a letter,⁴⁰ and with the many others whose names have not come down to us.

³¹ Hist. Eccles., lib. xv, c. 26.

³² PLINIUS, Hist. Nat., lib. xxxvi, c. 6.

³³ CICERO, Offic., iii; VALER., lib. viii. 2.

³⁴ TACITUS, Annal., lib. iv.

³⁵ LAMPRIDIUS, in Commodus, cap. xvi; JULIUS CAPITOL., in Pertinace, cap. v.

³⁶ In Tetrico jun., cap. xxiv.

³⁷ Ibidem.

³⁸ AURELIUS VICTOR, De Caesar., 35; VOPISCUS, Aurelianus, 31; TREBELLIVS, Trig. tyr., 23.

³⁹ NARDINI, Roma ant., i, p. 186.

⁴⁰ Epist. xviii, lib. vii.

Better determined and more worthy of notice are the records of a number of notable Christians who dwelt on the Coelian: (1) the house of St. Clement, where this illustrious disciple and successor of St. Peter held the meetings of the first converts in times of persecution, and where, in the earliest years of the peace of the Church, was built the great Clementine basilica which was again brought to light not long since by Father Mullooly;⁴¹ (2) perhaps the house of the four martyrs called SS. Quattro Coronati, over which Pope Miltiades built in honor of these saints, early in the fourth century, the beautiful church which still remains;⁴² (3) the house of St. Faustus and that of St. Gregory, of which I will speak later; and (4) the house of the Valerii, contemporaries of SS. John and Paul. They were the descendents of the ancient Valerii Poplicoli, famous in the third century for nobility and greatness. About the middle of the fourth century, this illustrious family became Christian and left notable memorials of itself in the annals of church history. To it belonged Valerius Severus prefect of Rome in 382, a portrait of whom is the fine bronze found on the Coelian three years past with the inscription,⁴³ DOMINVS LEGEM DAT VALERIO SEVERO; also the sainted couple Pinianus and Melania junior, and several others, up to the fifth century.⁴⁴ In this house of the Valerii, there were built, at a later date, a free hospital, *xenodochium Valerii* or *a Valerii*,⁴⁵ and the monastery of Sant' Eras-

⁴¹ MULLOOLY, *Saint Clement and his basilica in Rome*, Rome, 1873; DE ROSSI, *Bullettino*, 1863, p. 25 sqq.; ARMELLINI, *Le Chiese di Roma*, p. 191.

⁴² ARMELLINI, *op. cit.*, p. 571. It is DE ROSSI's opinion (*Bull.*, 1863, p. 27), that the houses in which the faithful gathered in times of persecution, when they were, after Constantine, changed to basilicas preserved the name of their former owner. In case this owner had received, after death, the honor of sainthood, the basilica was consecrated to his or her honor and cult. In the early years of the peace, no church was dedicated in the name of a saint unless it contained the tomb or some other record of the history of the saint.

This observation may help others as it helped me in my discovery of the house of SS. John and Paul. In fact, the basilica of the SS. Quattro Coronati on the Coelian rises over the ruins of a Roman building which it would be well to explore.

⁴³ GARRUCCI, *Storia dell' arte cristiana*, tav. 469, 1, tome VI, p. 104; DE ROSSI, *Bullettino*, 1867, p. 27.

⁴⁴ DE ROSSI, *Bull.*, 1865, p. 45, 1873, p. 93, 1876, pp. 14, 54, etc.; *Inscript. Christ.* I, p. 150, No. 340; *Roma Sott.*, III, p. 720; *La casa dei Valeri*, 1886; TILLEMONT, *Mémoires*, x, pp. 592, 603, 823, XIV, p. 233.

⁴⁵ BIANCHINI, *Vitæ Pont.*, in *Leonem III*, sect. 408 from *Cod. Vat. Pal.*, 1811; DUCHESNE, *Lib. Pont.*, I, pp. 456, 482.

mus near the basilica of San Stefano, built under Pope Simplicius in the fifth century.⁴⁶

II. SURROUNDINGS OF THE HOUSE OF SS. JOHN AND PAUL.

In the midst of all these classic and Christian edifices, the house of Saints John and Paul stood out finely on one of the pleasantest sites of the hill. Turning from the triumphal way at the foot of the Palatine, it is reached after climbing, for about a hundred metres, the steep ascent of the Coelian. It forms of itself a block or *insula*, and is surrounded by three streets: one along the northern front, in the lower garden of the Passionists; another on the east, leading from the present square of the basilica toward the Colosseum; the third is still open, under the name of *Via dei SS. Giovanni e Paolo*. The names of the first two are not known, but their existence is undeniable since the investigations I have made; the third is the already-mentioned *Clivus Seauri*.

As soon as Nero had brought the *Acqua Claudia* as far as the neighborhood of the garden of SS. Giovanni e Paolo, as Frontinus relates,⁴⁷ this portion of the Coelian became one of the most notable parts of Rome. Innumerable buildings arose around the famous *nymphaeum* which this prince had erected to exhibit the waters, and to afford to the Romans a new and more accessible pleasure resort.⁴⁸ Through a hundred mouths, pipes, and canals, arranged in order on the surrounding walls, the waters fell most effectively⁴⁹ from the heights of the artificial hill which is in front of the Colosseum, rising to a height of a hundred and twenty-five feet from the natural level, where at present stands the large garden of the *ritiro* of SS. Giovanni e Paolo. Fountains placed below them received the waters and sent them up again in showers and streams, whence they were carried off through subterranean pipes to the Neronian pool near by, *ubi amphitheatrum erigitur moles*.⁵⁰ When the Flavii destroyed the useless works of Nero, restoring Rome to herself and her citizens, as Martial says, the *nymphaeum* was not entirely abolished, and the charming play of

⁴⁶ DE ROSSI, *La basilica di S. Stefano e il monastero di S. Erasmo*: Roma, 1886.

⁴⁷ *De Aquaeduct.*, I, 20; II, 76; LANCIANI, *I commentari di Frontino*, p. 153 sqq.

⁴⁸ CANINA, *Indice topografico*, p. 73.

⁴⁹ NIBBY, *Roma nel 1838*, I, pp. 6, 58; CANINA, *loc. cit.*; LANCIANI, *op. cit.*, p. 153.

⁵⁰ MARTIALIS, *De Spectac.*, Ep. II. The last remains of these fountains were excavated, on the site mentioned, in the time of Pius IV: see VACCA, *Memorie*, 22.

the *Aequa Claudia* continued, at least in part, in front of the house of our martyrs. The same may be said of the buildings which, restored to nobler use, continued to adorn the declivity around the house within the entire radius now occupied by gardens and vineyards.⁵¹ The Flavian amphitheatre was erected in the place formerly occupied by the pool, and, on the heights of the hill, Vespasian erected the temple of Claudius already begun by Agrippina and destroyed by Nero.⁵² In this way, the house of SS. John and Paul found itself in front of and almost contiguous to one of the greatest temples of pagan Rome, the *Claudium*, which with its *cella* and porticoes⁵³ occupied a rectangular area of three hundred and eighty-five square feet.⁵⁴

The grotto of the Neronian arches which discharged the *Aequa Claudia* was lengthened under Septimius Severus and Caracalla by another series of arches going from the *Claudium* to the Palatine.⁵⁵ These new arches were built along the road that passed by the north side of the house of the martyrs, in front of which they formed a new magnificent façade opposite its main entrance. They begin on the front of a grandiose monument which there extends from south to north on the right bank of the street that leads to the Colosseum. It consists of two superposed rows of arches built of large masses of travertine of a rich design in bosses, with cornices and friezes which are purposely left rough in their outlines and finish. The lower row is now entirely buried, through the raising of the level at that point where the hill falls abruptly toward the plain; eight arches remain above ground, two of which are half destroyed and covered up by modern constructions. Each has an opening of about three and a half metres and a height of nine metres from the ground to the upper moulding of the cornice (PL. XVII).⁵⁶ Several opinions, more or less arbitrary,

⁵¹ That what is here stated is true, has been proved by several excavations which I have here made. This may be deduced from the following inscription (*CIL*, VI, 1728, b): FL · PHILIPPVS · V · C · PRAEFECTVS VRBI | NIMPHIVM · SORDIVM · SQUALORE-FOEDATVM · ET | MARMORVM NVDTATE DEFORME · AD · CVLTVM | PRISTINVM · REVOCAVIT.

⁵² SUTONIUS, in *Vespasiano*, cap. x.

⁵³ MARTIALIS, *loc. cit.*

⁵⁴ AURELIUS VICTOR, *De Cæsar*, cap. ix; CANINA, NIBBY, *loc. cit.*; JORDAN, *Topograp.*; PRELLER, *Die Region.*; etc. A portion of the plan of this temple is designed on one of the fragments of the Capitoline plan (JORDAN, *Forma urbis Romæ*, tav. x, No. 45).

⁵⁵ LANCIANI, *op. cit.*, p. 160.

⁵⁶ NIBBY, in his *Roma nel 1838* (I, 658), refers to a third row of arches placed above these two. I cannot say whence he derived such information. It is certain that no trace remains of another story in this monument, which may be regarded as complete as it stands, for its two tiers of arches are architecturally symmetrical.

have been held by archaeologists regarding this monument.⁵⁷ In my opinion, it is nothing else than the terminus of the Neronian arches mentioned above. As this aqueduct was the only one built above ground within the city, there was every reason for giving it such a façade at the place where its waters were discharged.⁵⁸

Nothing can be said of the buildings that adjoined the house of SS. John and Paul on the side facing the Palatine, both because there is no mention made of them in classic writers and because the remains which I have uncovered there are too fragmentary to serve as a basis for conjecture. Such, however, is not the case with the side by which the *Clivus Scauri* passes. There was the paternal home of St. Gregory. It is well known that this descendent of the Anici, despising the vanities of the world, retired in the flower of his years to live a solitary life in a monastery built by him in his own house, of which records and remains still exist.⁵⁹ Somewhat further up and immediately opposite the house of John and Paul are still standing notable remains of a public building which all architects agree in considering the *Mansiones Albanæ*,⁶⁰ or the barracks of the soldiers that formed the regular garrison of the Alban mount.⁶¹ The building extended, on one side, to the Servian wall, on the other, up to the house of St. Gregory and above up to the square of SS. Giovanni e Paolo. To it belong, apparently, the arched niches, eight or more of which are still to be seen on the square itself, similar to those frequently found in large Roman constructions like the Palace of the Caesars and in several places on the Coelian itself. The house of the martyrs was joined to the above building of the *Mansiones Albanæ* by means of high galleries with a double arch like those found in the recent excavations of the Roman Forum on the *via nova* under the Palatine. Two of these flying galleries still remain in part (PL. XVII), the other intermediate ones that now exist have been several times repaired and made over

⁵⁷ For example, in the cited works of NARDINI, NIBBY, and CANINA, whose conjectures have passed as certainties in the greater part of modern guide-books of Rome.

⁵⁸ The *specchi* which I found above these vaults and the adjoining tanks or *piscine*, the direction of the Neronian arches toward this monument on one side and that of the Severian arches on the other, come in support of this assertion, which agrees with what FRONTINUS says, *De Aequeduct.*, I. 20; II. 74.

⁵⁹ JOHANNES DIACONUS, *Vita S. Gregorii*, lib. I; S. PETRUS DAMIANUS, *Opusc.* XIX; GIBELLI, *Memorie storiche della chiesa dei SS. Andrea e Gregorio*: Siena, 1888, §1.

⁶⁰ ULRICH, *op. cit.*, p. 35.

⁶¹ NIBBY-NARDINI, *op. cit.* I, p. 202; CANINA, *op. cit.*, p. 50.

in the Middle Ages. A second military station, also contiguous to the house of the martyrs, existed next to the one just described in the grounds of the present *Villa Celimontana*. Its real site was shown by the two important bases found there in 1820. It was the station of the fifth cohort of the *Vigili*, which was placed there to defend the Coelian and the neighboring region of *Porta Capena*.⁶²

For the sake of brevity, I shall abstain from any further considerations, for enough has been said to serve the purpose of showing what were the surroundings of the house of SS. John and Paul. Although this house was not situated on one of the highest points of the hill, its unusual size and isolation made it command the surrounding buildings. Its height, of about 15 metres above the street, gave an enchanting view. Below, rose the palace of the Caesars as a second miniature city on the little Palatine mount; to the right, a part of the Forum with its majestic temples and splendid porticoes; the Capitol, the Colosseum, the baths of Titus and of Trajan, and the numberless buildings of the Esquiline, on the north. Eastward was the temple of Claudius, high up on the hill, surrounded by a forest of columns, the buildings of the *Caput Africae*, the circuses, the shrines, and the military stations. Then, southward, as the hill slopes down to the valley between the Esquiline and the Aventine, the eye wandered over houses and palaces, over the walls of Aurelian, along a broad horizon limited by the Latin hills; the Ostian, Appian, and Latin ways, rich with gorgeous tombs, lined the valley below, filled with numberless patrician villas in the midst of beautiful gardens and parks. But, of all this, nothing now remains but ruins and a desert and some modern structures. Alone, the house of SS. John and Paul still stands as a remnant of the by-gone splendors of the Coelian.

III. HISTORY OF SS. JOHN AND PAUL, AS CONNECTED WITH THE HOUSE ON THE COELIAN.

Historic and archæologic documents unanimously inform us that John and Paul lived in the middle of the fourth century from the reign of the great Constantine to that of Julian the Apostate. Their *gens* is unknown, for their birth-names have not been preserved, but only their Christian name or *agnomen* which, according to custom, they probably received at the time of their baptism.⁶³ It is certain

⁶² *CIL*, VI, 1057. KELLERMANN, *Vigilum roman. latercula duo coelimontana*: Roma, 1835.

⁶³ THEODORETOS, *Serm. VIII in fine*; EUSEBIOS, *Hist. Eccles.*, c. XXV; CHRYSOSTOMOS, *Hom. XXI in Genes.*, *Hom. de S. Melet.*, *Con. Nicen.*, can. XXX.

that they were persons of much importance and high repute at the imperial court in the time of the Constantines. It would seem that they at first followed a military career, in which they were very successful, and were then admitted to the imperial court as high officers: *olim romulei servantes moenia regni, Barbaricos strarunt saepe mucrone globos*, as Florus of Lugdunum⁶⁴ writes; and as we read in an antiphony of the ancient liturgy: *sub Constantino Augusto militantes, fidem Christi suscipere meruerunt*.⁶⁵ In the paintings that were made of them in various times and places, they are always represented in military garb, and hence came the usual opinion of the vulgar, that they were never anything but soldiers. However, in a fresco found in their house, they are dressed in the palatine robes of officers of the palace, such as were worn in the Byzantine period.⁶⁶ When, in 330, the imperial court was transferred to Byzantium, it is to be supposed that the two illustrious courtiers followed their prince to the new capital and remained there more or less regularly at their post up to the accession of Julian. This opinion is made almost a certainty from the sum of the facts recounted in the *Acts* of these martyrs, and because we know that Julian, after having been saluted emperor, never again set foot in Rome. Among the many *amphorae* for private use found in the house on the Coelian, there is one of singular importance for the signs upon it, which show that it contained wine from Greece and that the sender was a Christian. Comm. De Rossi, in illustrating this object before the Academy of Christian Archæology, asserted among other things that the fact, that this wine came from Hellenic lands and from Christian property, would lead to the belief that the two saints owned landed property in the East:⁶⁷ this is a further argument in favor of their establishment in the East.

However this may be, it is certain that, after Julian became emperor, Paul and John retired to private life in their house on the Coelian. It is not known how they came to own it, or when they first began to live there. To judge from its position, so near to the Palace of the Caesars, it is to be conjectured that their position at the imperial court obliged them to choose a dwelling in this vicinity, and that this happened while the court was still in Rome. Nor is it

⁶⁴ Ap. MABILLON, *Analecta*, t. I, p. 402.

⁶⁵ Cf. MAZOCCHI, *Calend. Neapolit.*, t. III, p. 725, No. 499.

⁶⁶ DE ROSSI, *Roma Sott.*: *Il Cimitero di Genesio*, p. 659; *Bullettino*, 1869, p. 7.

⁶⁷ DE ROSSI, *Bullettino*, 1888; *Conferenze*, Feb. 1889.

improbable that this house belonged to the Palace, as did all this part of the Coelian in the time of Nero and his *Domus aurea*. Or, judging from the great size of the building, it may have been the private palace of the princess Constantia, to whose special service John and Paul were attached; and she may have left it by will to these faithful ministers as a reward for their services. The house itself, as I shall shortly demonstrate, was of ancient plan, modified and restored several times during the third and fourth centuries. The religious paintings with which it was decorated in about the middle of the fourth century show that already at that time it was inhabited by Christians, that is, by our martyrs. This is a proof all the more beautiful that it is so rare (not to say unique) to find a private Roman house adorned, like a church, with religious compositions.

It is not my intention to discuss in this place the intricate question, so much disputed, of the Constantia named in the *Acts* of SS. John and Paul, in order to decide who this princess was. I will only say, with Comm. De Rossi,⁶⁸ that she is not the Constantina of the basilica of Sant' Agnese on the Via Nomentana, nor is she one of the daughters of the emperor Constantine, but is one of his descendants, probably a niece on the side of Hannibalianus or Gallus, the successive husbands of his daughter Constantina. In support of the truthfulness of the above-mentioned *Acts* that speak of Constantia, a fact should here be adduced from one of the paintings in the house on the Coelian. It is a fresco, of the close of the fourth century, which represents a composition with six figures. Of these the principal are two young men standing on either side of a noble damsel, richly robed and of noble presence: De Rossi recognizes in them John and Paul and the princess Constantia: *cum quibus Augusto radiat Constantia serto*,⁶⁹ as sang Wandelbert, a writer of the ninth century.⁷⁰

Neither is it my intention to enter into an examination of our present text of the *Acts* of SS. John and Paul, either for the purpose of extracting historic information or for deciding on their value from the critical standpoint. They include, however, a side that must be touched upon, as it is connected with what forms the greatest inter-

⁶⁸ DE ROSSI, *Mosaici: Il Mausoleo di S. Costanza*.

⁶⁹ *Martyrolog. ad diem 26 Jun.*

⁷⁰ DE ROSSI, though previously prejudiced against the authenticity of the *Acts* in so far as they refer to Constantia, as soon as he saw this painting was converted to the above interpretation.

est of these discoveries on the Coelian. We have found in the house of John and Paul not only an archæologic monument of the first order but a luminous proof of the truth of Christian traditions and historic reminiscences. According to Tillemont and his followers, these *Acts* are a tissue of fables, a contemptible legend of Byzantine times. Such criticism is now shown to be false. The monuments, discovered after more than fourteen centuries of oblivion, correspond perfectly and in every detail to the description in the document. Furthermore, surprising as it may seem, it was possible, by following the indications of this document, to conduct the excavations by *a priori* knowledge, in search (1) of the *aedes* on which we read that the *titulus Pammachii* was erected; (2) of the *cella* in which the confessors of Christ were surrounded at night by the soldiers of Terentianus and put to death; (3) of the ditch in which their bodies were carefully hidden by their butchers; (4) of the *confessio* made on the site by Byzantius; finally, of the tomb and the traces of the three contemporary martyrs, Crispus, Crispinianus, and Benedicta. With this document as a guide, I succeeded in finding, one by one, all these precious remains spoken of in it: a document held to be worthy of little faith if not totally spurious. And so the discovery of the house on the Coelian may truly be called a triumph of historic truth and of the traditions of the Roman Church.

It would be out of place in this article to attempt to show minutely the correspondences between the *Acts* and the monuments discovered. Thus, in the *Acts*, it is said, that secrecy having been enjoined regarding the place where the bodies of John and Paul had been placed, Crispus, Crispinianus, and Benedicta sought for them diligently and in anguish of spirit, and when they had found them *intra parietes aedium*, they would come to venerate them and pray at the tomb. Now, in the monument itself, there are three paintings, dating from the close of the fourth century, placed next to one another on three separate walls, which reproduce this story with singular naturalness. In the *Acts* it is added that the satellites of Julian, having heard of the fact, ordered the capture of the three bold Christians who were caught *in flagrante* on the spot, and were condemned to pay the penalty with their heads. In the monuments, by the side of the three above-mentioned frescoes, are two others, painted at the same time, which represent to the life this arrest and this martyrdom in its most minute details. One of these details is, that the bodies of the martyrs are ignominiously cast to the dogs. This also is represented by the

Christian painter a century before the *Acts* were written. This passing mention is sufficient for the present purpose, and a minute description of the paintings will be given in its place when the *confessio in aedibus*, to which they belong, is spoken of.

A few words may now be said of the way in which the discovery of the house of SS. John and Paul took place. It was not made by chance, as is usually the case. It was my intention to write some historico-archæological memoirs on the martyrs of the Coelian and their basilica. A study of the subject at once showed me that the saints inhabited this declivity of the hill, and that the basilica rose over their house. At first, it was my opinion that little or nothing could have remained of the building, as is unfortunately the case with all the other *memoriae* known to have been erected in *aedibus sanctorum*. I wished, however, to be certain of the facts, and, having noticed that the level of the street was in great part lower than that of the interior of the basilica, I began to hope that in this difference I might find some remains of the house. In March 1877, I let myself down into one of the tombs made below the pavement of the basilica near the high altar, dug around in the earth and bones, and found traces of paintings that had all the characteristics of the art of the fourth century. Being encouraged by Comm. De Rossi, to whom I communicated my discovery, I proceeded to transport the bones to another spot in the church, and cleared the tomb of earth, demolishing all the modern additions made to convert it to such use. After a month's labor, I had opened up an entire chamber, covered on three walls with frescoes of the period mentioned. From this chamber I passed, by a passage which I discovered, into another, then into a third and so on. All the rooms that are placed on the main axis of the *domus* were filled with well-trodden earth up to the top and on their crushed vaults rested the mosaic-pavement of the basilica. This made it a matter of great difficulty to empty them without injuring the church above. But this was finally accomplished, and now more than one-half of the *aedes* which was enclosed within the perimeter of the basilica is unearthed and accessible. This part of the monument is what will be described in this and successive papers. The excavations are still continuing, and new discoveries are being made, but the main and historic part of the building is already opened up, and future additions cannot change the archæological data which will here be given.

IV. PLAN OF THE HOUSE.

Two main classes of houses were distinguished by the Romans: the *domus privata*, that served as a dwelling for the owner or for a family; and the *insula*, which was either several houses joined together or several apartments suited to the use of several tenants. The noble and well-to-do classes usually lived in a private house or palace, while the common people, on the other hand, used to a life entirely in the open air, rented some rooms in an *insula* and were satisfied with very modest accommodations. The Coelian house inhabited by SS. John and Paul, who were illustrious and wealthy, was a *domus* owned by them, though from its size and from being surrounded on all sides by streets it looked like an *insula*.

Although differing in dimensions, in the number and arrangement of the rooms, according to the wealth of the owner or the conditions of the ground, Roman houses were usually modelled on a similar plan determined by architectural prescriptions and special laws then in vogue. The *prothyrum* or entrance-hall led from the street to a large rectangular *atrium*, covered only along its sides by a roof supported by columns or piers: this was the *compluvium*, in whose centre was a marble basin, the *impluvium*, to receive rain-water. To the right and left of the portico were arranged a number of *cubicula* or rooms for various domestic uses. At the end was the *tablinum*, the principal room in every Roman house, which served as a reception-hall. It was open at both ends, so that it was possible, from the street, to see through the whole house from one end to the other, across the *tablinum*. Behind this hall was a second *atrium*, always present in houses in the least comfortable (even when the first was wanting), called the *peristylum*, from the colonnade that encircled it. This constituted the internal portion of the house. Along its covered sides were arranged the chambers in which the family lived: the bed-chambers, *cubicula nocturna et diurna*; the *triclinium* or dining-room; the *pinacotheca* or picture-gallery; the *conclavi* or halls reserved for the especial use of the owner, etc. Fountains and gardens usually adorned the peristyle, which was considered the pleasantest part of the house. Such a model is followed in nearly all the houses of Pompeii. It is followed in the house on the Coelian, although its plan was several times modified during more than a century, and especially during the time of the martyrs. The Romans had this peculiarity, that,

unless it were impossible to do otherwise, they never demolished the old when they built the new, but left it and sought to unite the two. It is astonishing to see so often, in Rome as in the province, several kinds of construction in the same building, the different periods of which are evident. Three such periods are manifest in our Coelian house: that of the end of the second century; one of the third and fourth centuries; and one even of the fifth and sixth, after the house had been changed into a basilica. These modifications affected the original plan considerably, which also remains, in part, uncertain, owing to the incompleteness of the excavations.

The main entrance, on the outside, the *ostium*, *prothyrum*, and *compluvium* with the annexed buildings, are where at present stands the lower field of the Passionist *ritiro*, in the space between the municipal *palestra* and the new chapel of San Paolo della Croce. I have already said that two streets passed at this point, one along the west side of the *Claudium* toward the Flavian amphitheatre, the other, from the *Claudium* to the Palatine, along the line of the Severian aqueduct. The entrance of the house opens on the latter street. I have not uncovered but have merely investigated this front half of the building, the whole of which is outside the perimeter of the basilica. Only a few vestiges of it remain, disturbed by the work undertaken here during the last fifty years. Some beautiful polychromatic mosaics were found here, some of which were destroyed, others were again covered over. More than one-half of the peristyle, also, is lost, that part outside the basilica. The columns of both *atria* are probably the same that were used in the construction of the basilica, and still stand where Pammachius placed them. They are of black granite, a little over four metres in height, with a diameter of 50 centimetres. For a large basilica with three naves, at least twenty metres high, columns of such small dimensions must have appeared out of all proportion, as they certainly are; but the pious founder, in erecting the church within the dwelling of the martyrs, may have preferred to pass over architectural proportions in order to put to such use the columns that were associated with the place. A similar use was made of all the other decorative marbles of the house.

The remaining part of the peristyle is to be found within the area limited by the altar of S. Saturninus and that of S. Pammachius, under the left nave of the church. Investigations on this spot have made

this certain, but the site is still filled with rubbish. Consequently, of the entire house only the inner chambers have been preserved in good condition, those which are situated behind the peristyle. Fortunately, this was, so to speak, the heart of the house, the part in which the owners dwelt. This is clear from the arrangement of the rooms mentioned above as on the axis of the building, and from their rich decoration of mosaics and frescoes; whereas all the others of which there is any trace are not only without decoration but are of an inferior quality. The same may be said of the other adjacent rooms on the same floor, which will be described in another place.

That part of the house which I term the *parte nobile*, and which is in the rear of the peristyle, consists of five parallel rows of two chambers. In the third and central row is the *tablinum*, about six metres long by five in width. A large arched opening leads from it into the internal *atrium*, and another similar archway on the opposite side opens into a second smaller chamber or passageway. From this second room, which was open on the side facing the street, the *tablinum* received light and air. Two doors in the side-walls led into adjoining rooms. However the use of the *tablinum* may have varied, in successive periods, from its original purpose of containing the family archives, it was an indispensable part of every Roman house. In this case, instead of being placed in front of the *peristylum*, it is behind it, perhaps for topographic reasons.

Of the other rows of rooms one only has not yet been freed from earth. Thick partition-walls separate these rooms, which communicate by means of wide passages opened in the walls. Two of these rows have a simple archway instead of this division-wall. A glance at the plan on PLATE XVI will show the details of the entire arrangement.

The rhomboidal shape given to all these rooms of the *parte nobile* may appear strange, especially as the street itself is at right angles with the axis of the building, and therefore could not be the cause of this angular deviation. A careful examination of the PLAN will show that this deviation increases gradually from south to north. The first zone of the building near the *Clivus Scauri* is perfectly rectangular; the second is almost so on one side, while on the other it deviates slightly from the regular plan, from one end to the other; and, finally, the third bends so much at the *atrium* and in turning becomes so narrow as to violate all rules and proportions. The only explanation of this is, that,

before the house was reduced to its present condition, a second street passed along that side, obliging the builder to follow its line.⁷¹

The *cryptoporticus* or corridor that flanks the oblique side of the court is still paved with those polygons of lava which the Romans used for their public roads. This extends over a surface of two metres, which is the width of an ordinary street: beyond that point the pavement is of a different kind.

When the street was abandoned and the house was enlarged on that side, various modifications of the structure became necessary. There are still evident proofs of this fact. In the middle of the front wall of the old building, where is now the great opening which joins the *tablinum* to the court, there used to be a simple exit of small size. This was one of the outer doors of the house: the enlargement both in height and breadth dates from the fourth century. Besides this door there were no others that opened on to the street, from the *tablinum* onward at least; nor were there any in the opposite wall. It therefore became necessary, in order to establish communication between the first building and the new additions, to open two doorways, one in each wall. As these were found to be sufficiently strong, it was deemed not necessary to place over them architraves or arches, and this is enough to show them to belong to a date later than the building.

At about the same time, several other adjoining constructions were added to the house: of this there are still visible traces in the joinings which belong to the fourth century, whereas all the added parts belong to the third or even perhaps to the second century. It is easy to identify these additions, on the *PLAN*, as they all are built on an axis different from that of the house proper, just described; and, besides, their irregularity shows that they have nothing to do with the original plan of the house. The additions are distinguished on the *PLAN* by a lighter tint.

Back of the five rows of rooms that composed the *appartamento nobile* is a rectangular space four and a half metres wide and twenty-five metres long—the exact width of the façade of the house on that side. Within this enclosed space, which has been only partially excavated, six doors open onto the street often mentioned, the *Clivus Scauri*,

⁷¹ Pompeii offers, among a hundred others, an instance quite like this in the suburban villa of M. Arrius Diomedes. The so-called Street of Tombs, on which it is situated, runs obliquely to the axis of the building, which led to the adoption of the triangular form in which it is built: OVERBECK, *Pompeii*, 4th ed., p. 369.

each one of which corresponds to one row of rooms or to one of the passageways that lead to them. In the fourth century, division-walls were placed there at different points, in order to prevent passing through these doors. At first, however, this entire gallery was open, and looked like a long vestibule with doors that communicated with the inner rooms. Was this, then, the *prothyrum*, and therefore the place of the main entrance to the original house? If it were so, we should be obliged to regard it as of very small dimensions, as without peristyle or *atrium*, on account of the streets that circumscribed it. Any opinion would be but a mere conjecture. It can only be asserted, with safety, that at the time of SS. John and Paul the *domus coelimoniana* had no entrance on that side, and the six doors, interrupted by walls, served but to give light and air. I was hence led to seek for the main entrance to the house of the fourth century at the point where I found it, namely, beyond the *tablinum*, outside the perimeter of the basilica.

The house therefore received light from the street on the south side, and on the north received it from other doors and windows which opened onto the inner court. After the works of the fifth century, however, all these openings were closed or were covered by two walls which were then built within the house itself, along its two sides, in order to place upon them the twenty-four columns of the church. Thus was the ancient building left within the perimeter of the new, and was cut into three parts, following the line of the three naves of the basilica: not only the light but all communication between the sections was cut off. These walls are given on the PLAN.

V. SECTION AND STRUCTURE OF THE BUILDING.

The house had two stories, or three including the ground-floor. To the ancient habit of preserving the old in raising new constructions we owe the preservation of the façade of these three stories at the time of the construction, in the fifth century, of the basilica *in domo sanctorum*. This façade is still visible on the left side of the street of SS. Giovanni e Paolo, and comprises the entire south side of the church. To the ground-floor belong the six great arched doors symmetrically arranged in a row as a *peristerus* or inner portico. Above them are two rows of windows, indicating the lines of the two upper stories. When these stories were destroyed in order to make way for the basilica, their outer wall was retained to become that of the church. The windows of the first story were closed, and those of the second story

were used as the clerestory of the basilica. Their tops only were destroyed in order to lengthen them and adapt them to their new use.

This example of a three-storied façade of an ancient house may be said to be the only one known. In Herculaneum something of the kind is seen in a small one-storied building;^{71a} and recently at Pompeii has been uncovered, on a hill-side, a house which appears to have had several stories; but such examples may be termed ruins or vestiges that have nothing comparable to the grandiose façade of our *domus coelimontana*. There were, of course, both in Rome and in the provinces, many higher and more magnificent buildings. We know that special laws were passed to keep within bounds the mania to raise houses to a great height.⁷² Partly from the too-rapid increase of the population, partly through private vanity, this abuse had become quite general, and Petronius wrote of it, *aedificant auro, sedesque ad sidera tollunt*;⁷³ and the rhetor Aristides could say, that all Italy could not hold the buildings of the immense city, if they were reduced to a single floor.⁷⁴ But all such buildings have been destroyed, and this one would certainly have suffered a like fate had it not been incorporated in the constructions of the basilica.

The height of the house from the street-level is about fifteen metres; six of which belong to the ground-floor and four to each of the upper stories. This height is in perfect architectural relation to the length of the building, which is about thirty metres. Without being at all rich in the display of marbles and decoration, the great façade on the *Clivus Scauri* is singularly fine in the arrangement of its parts and for its elegance, even since it was deprived of all ornament and reduced to the bare wall. In the drawing reproduced in PLATE XVII, I have confined myself to copying present facts, except in so far as I have left out certain arches built, during the Middle Ages, to support that side of the basilica, as well as some repairs executed from time to time. Neither is the façade continued in the drawing: it originally stretched eleven metres further along the same line up to the portico of the basilica, beyond the five rows of chambers which form the main section of the house. It is of different design and period. The windows in this part of the wall which, like the others, were closed in the

^{71a} COMPARETTI e DE PETRA, *La Villa Ercolanese di Pisoni*. The *Casa del balcone pensile* at Pompeii is an example of a two-storied building.

⁷² CICERO, *De lege agraria*, II. 35.

⁷³ PETRONIUS ARB., *Satyricon*.

⁷⁴ JUVENALIS, *Sat.* XIV; TACITUS, *Ann.*, VIII. 3.

fifth century, are of a single story and do not correspond in either form or level with the preceding ; and, besides, there is no exit of any sort on the ground-floor. It is easy to see that this outer wall belongs to the building which I mentioned above as having been added to the primitive building during the fourth century. That it is so, is shown by the plan on PLATE XVI.

The illustration of this façade will render a more minute description unnecessary. One further remark it is interesting to make : all the windows that remain intact, as are those on the first floor, had a wooden architrave under the brick arch or rather archivolt, and this wood still remains in place, in good preservation. This is not so remarkable, considering the great care taken by the ancients in their choice of wood for construction, and in their selection of the season for cutting it.⁷⁵ Flaminio Vacca relates, in the time of Pius V, that, in demolishing some walls of the Republican period⁷⁶ in the forum of Nerva at the so-called *Arco dei Pantani*, there were found dovetailed wooden cross-bars used to bind together the large stone blocks.⁷⁷ In the Neronian port at Anzio, the beams of the foundations of the moles still remain, of extremely hard oak,⁷⁸ and just as well preserved was the wood extracted from the lake of Nemi known under the name of *nave di Tiberio*, which also belonged to foundations.⁷⁹ On the west side of our house on the Coelian, there remains of the façade all that part which serves as the end-wall of the basilica on either side of the apse, above the botanical garden. In the next chapter, I shall describe this side. The other two fronts have been either demolished or hidden by the ancient and modern constructions of the church.

Several staircases joined together the different apartments of the building. The main staircase was placed in the inner court at the entrance to the *tablinum*, on the left. There remains only a portion of it, consisting of fifteen steps, reaching as far as the level on which was built, at the close of the fourth century, the *confessio* of the eponymous martyrs. The traces of other steps on the two side-walls show that they continued in the same direction for some distance, in fact, as far as the story above, which was placed at least a metre above the level of the present pavement of the church ; so that there must have been at least twenty steps. They were made of stone from the

⁷⁵ VITRUVIUS, II. 9. 10.

⁷⁶ NIBBY, *Roma nel 1838*, I, p. 235.

⁷⁷ PACCA, *Memorie*, § 89.

⁷⁸ NIBBY, *loc. cit.*

⁷⁹ NIBBY, *ibid.*, p. 236.

Tivoli quarries (*pietra tiburtina*), and rested on a tunnel-vault constructed between two walls, with an almost uniform width of 1.70 met. Of these I have found only some vestiges, according to which I have sought to readjust the stairway in order to make it passable. Before the house was abandoned and filled with earth, pilgrims used it in coming to the *martyrium* of the saints John and Paul.

Another small stairway, under the preceding one, led from the ground-floor to the rooms added at a later date, near the peristyle. These being on a lower level, it was necessary to place some steps at the opening made at the point of communication. A third staircase, not more than a metre wide, led to another lower story yet to be described, and still another led by a different way to the upper stories. The two latter stories, not having yet even been excavated, are not represented on the PLAN.

A few words are now in order regarding the construction of the building and its different parts. As in the great part of constructions of the imperial period,⁸⁰ nothing but bricks are employed, sometimes red, sometimes yellow. The facing of the walls is good, and varied according to the various periods of construction and the requirements of the site. Nearly everywhere triangular bricks are used, with which are mingled, after a certain number of courses, the usual courses of square bricks commonly called *goloni*, which served to unite more firmly the facing with the inner mass of the wall.⁸¹ In the earlier walls of the second and third centuries, the facing is interrupted at regular intervals by rectangles of reticulated work made of small pieces of tufa cut in cubes and fitted together like wedges, giving a design resembling a network.⁸² This method of construction is known to have been introduced into Italy during the last times of the Republic, and to have ended with the early Empire. But, although these walls of the second and third centuries are of fine material and precise workmanship, almost all those of the fourth are of the worst kind of construction. In both, however, there is this peculiarity, contrary to general custom, that the facing begins, not at the pavement of the rooms but at the lowest foundations. The same artistic difference is noticeable in the arches: among those of a good period there are several of such fine construction as to equal the finest Neronian brick-

⁸⁰ NIBBY, *loc. cit.*

⁸¹ NIBBY, *loc. cit.*

⁸² VITRUVIUS, II. 8; PLINIUS, *Hist. Nat.*, XXXVI. 51.

work, while others, of later date, are astonishingly irregular and carelessly built.

The inner and outer doorways are of varying shapes and sizes. Some were topped with a round arch, others, I infer, with a low arch erected over a marble architrave. This inference is based on the sockets I have found in all of them, with evident marks of the chisel used to extract the marble when the house was abandoned. The thresholds also were of marble, as may be seen from a few that still remain in place. The form of the ceilings varies according to the different shape of the rooms: some are *a vela*, others have cross-vaults or barrel-vaults, the latter form being used in nearly all the halls that varied much from a square plan. With a few exceptions, all were covered with stucco, without any cornices or other decoration in relief or *in-cavo*; this flat surface being covered in the finest rooms with a frescoed decoration. The height of their imposts was in proper proportion to the size of the walls. Their height in the centre is, in all the rooms of the *parte nobile*, five and a half metres: in the rooms of lesser importance, there is a medium height of three metres.

In one place only have I found any indication of the flat ceiling, which is, nevertheless, of such frequent use in Roman architecture under the names of *coelum* (Vitruvius, VII. 3. 3) or *lacunar* (Cicero, *Tusc.*, v. 21.; Vitruvius, VII. 2. 2). I am not able to say how the building was covered, as no part of the roof remains. The common custom, we know, was to cover the most costly buildings with marble tiles and slabs, while the inferior houses had brick tiles, *tegulae* and *imbrices*.⁶³ In the heap in which were buried all the remains of the destroyed parts of the house, have been found a great quantity of marble fragments belonging to the first kind of roofing and none belonging to the second, though terracotta fragments of other descriptions have come to light in considerable quantity. This would lead to the belief, that the roof was certainly of marble. The Romans sometimes used terraces instead of roofs, as is now often done in Italy, in order to secure places for taking the air without leaving the house.⁶⁴ In our house, I have found traces of this custom, also, over a chamber which is now in great part destroyed, to which I shall refer later.

As already noticed, the use of marble decoration in private houses was introduced on the Coelian by Mamurra, who was the first to carry

⁶³ PLAUTUS, *Mil.*, II. VI. 2; TERENTIUS, *Eun.*, III. V. 40.

⁶⁴ Suetonius, *Nero*, XVI; PLAUTUS, *op. cit.*, II. IV. 25.

out this form of adornment in his own house. It was therefore to be expected that, in the noble house of SS. John and Paul, this custom should be followed. Traces of marble incrustations, friezes, and ornaments of all descriptions have been found here in great quantities, giving us a high opinion of the beauty of the interior decoration of the rooms. Unfortunately, these are but minute fragments of what was destroyed by ruthless hands. Slabs of all kinds, cornices, bas-reliefs, friezes, bands, squares, colonnettes, capitals, bases, *etc.*, all worked in the finest style, have been collected in great number on all the points where excavations were carried on—*carystium*, granite, alabaster, black and verd antique, *coralaticus*, *fugitivus*, porphyry, and a great variety of other kinds of rare marbles, known and used in Rome and mentioned by Vitruvius and Pliny, were used in tinting the rooms with their varied colors.

The majority and the best of the flat marbles were placed in the pavements. Among the Romans, the commoner floors were covered with broad slabs of well-polished terracotta or with bricks bound together with fine mortar and arranged like a fish-bone; it was called *opus spicatum* from its resemblance to an ear of corn. A second kind consisted of a simple layer of pebbles (*astraco*) and potsherds well pounded, called *opus signinum*. All three of these ordinary kinds were used in the house in certain crypts and cells for domestic purposes. In the next place came the slabs of marble, almost square in shape and of a single color, used in the simplest form of luxurious pavements. More than one hall in this house was paved in this fashion, as is shown by the regular imprints on the *astraco* left after the removal of the marbles. Elsewhere, use was made of a mosaic of pure white without decoration, called by Vitruvius *opus tessellatum*, from its rectangular cubes. The work of this description in our Coelian house is extremely careless and irregular in the arrangement of the cubes, showing it to have been executed in the fourth century. The porticoes around the peristyle, which have been only partially explored, were paved in this manner.

There were also in the building far richer pavements. Such were those of fine mosaic of geometric design in white and black, or in yellow, red and green, cubes; the *opus sectile* made of larger pieces of marble of various colors, cut in varied shapes. Serpentine, *palombino*, porphyry, white and yellow marbles, are the dominant kinds used in this house, as at Pompeii and elsewhere. The extraordinary number of

dispersed *crustae* or of more or less fragmentary groups of them, which have been found in the excavations, shows that there were many rooms paved in this fashion. Of the *opus vermiculatum*, or *musivum* properly so called, which depicted figured compositions, I have found no certain traces. I say that there has been no certain indication of such work, for, of the many pieces of this *opus* picked up among the ruins, and forming parts of figures on a ground of gold or of blue *lapis lazuli*, I am not able to decide whether they belong to the house of the third and fourth centuries or to the basilica of the fifth century.

This is sufficient to show that, in this respect also, the *Domus coeli-montana* was not inferior to the richest Roman houses of the day.

PADRE GERMANO DI S. STANISLAO, PASSIONISTA.

Convent of SS. Giovanni e Paolo, Roma.

[TO BE CONTINUED.]

NOTES ON ORIENTAL ANTIQUITIES.

[PLATE XVIII.]

IX. A BABYLONIAN CYLINDRICAL BASRELIEF FROM URUMIA IN PERSIA.

This basrelief, now in the possession of the Metropolitan Museum of New York, was found in the mound of Geog-tepe, near the city and lake of Urumia, both of which were well known to the Assyrian kings, and were the scene of their campaigns. For a description of the mound and chamber in which the basrelief was found, I am indebted to Mr. E. C. Shedd, son of the Rev. J. H. Shedd, D. D., missionary among the Nestorians of Persia. Mr. Shedd was a teacher at Urumia at the time of the discovery of the cylinder, and visited the chamber in which it was found. I give his account.

"Over the entire plain of Urumia are scattered ash-hills of various sizes, to the number, at least, of twenty-five or thirty, and others are found on the plain of Suldúz, south of Urumia, but none to the north, in Salmas. These hills are, in some cases, composed entirely of ashes; in others the ashes have been added to a small natural eminence. In fact, there is scarcely an eminence on the plain that has not been increased, usually to a very large extent, by this means.

"Since the beginning of this century, the inhabitants have used these ashes to fertilize their fields, and a very large amount of broken pottery, and some brick and stone walls, have been continually uncovered, the stone being removed and sold. So far as we know, no cut stone has been found.

"The two largest hills are those of Degala and Geog-tepe. Degala Hill is composed entirely of ashes: it is about 100 feet high and 1000 feet long. At a point near the bottom of this hill a foundation-wall of burnt brick was discovered; the bricks measuring at least six inches thick by eighteen to twenty-four inches long.

"Unbroken earthenware dishes are also frequently discovered. The variety of style in the earthenware is not great. The most common forms are a round pot, with a small handle and large spout, and a round stand, open at both ends, and usually with long rectangular

openings in the sides, like large slits. A few specimens have some ornamentation; in one case, men on horseback are represented in an exceedingly crude manner, the horses led by footmen. The discoveries being made by ignorant workmen, it was impossible to learn at what depth the various specimens were found.

"Graves, also, have come to light. In a grave found at a depth of about fifteen feet, half-way down the hill, was a skeleton near whose shoulders stood two jars, exactly alike. A roughly executed ornamentation, consisting chiefly of a number of goats or rams, all intended to be exactly alike, extended around the centre of each jar. We have heard that skeletons have been found buried in large earthen jars, such as are yet used in Persia for storage.

"But, interesting as Degala Hill is, Geog-tepe Hill is, in some respects, yet more so. Copper rings and bracelets have here been found arranged around the skeletons in the graves.

"I may here remark that all these remains show signs of considerable antiquity. The surfaces of the burnt bricks crumbled very readily, and, of the skeletons, usually not more than a few pieces of bone remain. In the spring of 1888 the inhabitants of Geog-tepe commenced building a new church on the hill. Needing water for building purposes, they started a well. After digging down some distance they struck the room in which the cylinder was found. The floor of this room is on the surface of the earth proper, under a deposit of ashes nearly 27 feet deep. Its dimensions were as follows: length, 19 ft. 3 ins.; width at floor, 7 ft. 3 ins.; width at ceiling, 4 ft. 3 ins.; height, 7 ft. 2 ins. The walls were very rudely built of uncut sandstone, quarried into rough oblong blocks. This sandstone is the common building-stone of the country, and there is a quarry of it, about three-quarters of a mile distant, from which these blocks might have come. The blocks were about 1 ft. high, and $2\frac{1}{2}$ – $3\frac{1}{2}$ ft. long. There was no noticeable mark of any cutting-instrument on the blocks. The floor was paved with common sandstone flags. Some small fragments of bones were found under this, but so exceedingly rotten that it was impossible to make anything out of them.

"The vault was formed in the following manner: about four ft. above the floor, a course of stones projected slightly beyond that on which it rested, and from that point upward every succeeding course had a similar projection until the room at the ceiling was three feet narrower than at the floor. The remaining space was covered by huge

flat stones, one of which measured nine ft. in length. There was no doorway, but on one side, in about the centre of the room, was a hole in the wall, about one foot square, that extended a considerable distance. No mortar was used in the construction, and no attempt was made to smooth the projecting corners of the stones or to make them fit closely together."

Mr. Shedd informs me that quite a number of the earthenware vessels found in these mounds have been collected in the museum of the Missionary College at Urumia.¹ I cannot believe that the mounds are, as Mr. Shedd fancies, composed wholly of ashes: they are rather of clay which has become mixed with ashes and saturated with the nitrous salts of organic decomposition. One of the oldest known works of Babylonian sculpture gives us the design of a burial-mound in the process of making, the men carrying up baskets of earth and emptying them over the corpses of the slain.²

It will be observed that the chamber in which the cylinder was found was constructed on archaic principles of architecture, reminding one of certain prehistoric Greek and Italic chambers, and especially of some Etruscan tombs, for example, those of the archaic necropolis of Orvieto which date from the VII cent. B. C. The corbelled vault was formed by courses of stones projecting one over another. In this case, the inner face of the vault was not cut so as to form a continuous line, but the stone courses were left in the form of inverted steps. The space between these converging courses at the top measures four feet, and is covered by flat slabs, a peculiarity which places this chamber in a category totally different from the early domical Greek *tholoi*, and one which seems to belong to a more primitive stage of architectural development. This appears not to have been the usual method of making the Assyrian vaults, but was found by Taylor in the older Babylonian constructions of Mugheir (Ur), in brick, of course. If we may draw any conclusion from the construction of this chamber on the ground-level of the hill of Geog-tepe, we should be carried back to a period indefinitely earlier than 800 B. C.

The cylinder (PLATE XVIII-1) is of translucent alabaster, the surface being rendered somewhat opaque by exposure. It is 94 milli-

¹ I may add that in the library of the college is a considerable collection of Syriac manuscripts, gathered from old monasteries and churches, and that skilful copyists furnish, at a cheap rate, copies for European or American scholars.

² This is a relief found at Tel-loh: DE SARZEC, *Découvertes*, pl. III, c; PERROT et CHAPIEZ, *Chaldée et Assyrie*, fig. 383.

meters long, and 59 mm. in diameter; the walls are about 6 mm. thick. The lower edge is ornamented with the lines of alternating rectangles used to designate hills: the upper edge is ornamented with a line of rectangles, of which the alternate ones are deeply cut. The designs appear to be archaic Babylonian. Two doors swing outward on their posts, and are held by bearded porters, who wear only a low, two-horned cap and a short fringed garment or skin, hanging from a girdle at the waist. Between the two gates is the sun-god, Shamash, in his ordinary conventional form. He has the low, two-horned cap, and wears a long garment hanging down behind, and open in front to expose his advanced left leg. This foot is lifted on a low hill, but the leg is not properly drawn, so as to show the bent knee, but is made shorter than the other. In his right hand he carries a club with a knob near the top, resting on his shoulder; in his left hand, which is partly extended forward, he holds a weapon which has a blade, but which is not notched as this weapon generally is on the cylinders. Behind the left-hand porter stands Ea-bani between two upright standards: his face is in front view, as usual, but he steps toward the god. The front standard he holds in his two hands: it has, at the top, a conical object over three ring-like protuberances. The standard behind Ea-bani has, at the top, an ornament like a monkey seated with its bent knees close up to its body, and several waving lines rising from the top of its head. Ea-bani has a twisted curl on each side of his head, and his tail is carefully curled. The phallic organ is pronounced, as on the cylinders, but is differently drawn. Behind the right-hand porter three figures in procession approach the god. The first figure may be a man: his headdress has been lost; one hand is raised, and the other, laid across his waist, comes out from under his garment, which hangs unbelted over his shoulders, and reaches to the knee of the front leg and nearly to the ankle behind. The next figure is the common representation of what I regard to be the goddess Aa, wife of Shamash, with a long flounced garment and both hands lifted before her; she has the same low, two-horned cap that is worn by all, unless it be the figure last described, whose headdress has been lost; she has five rings about her neck, bracelets (as had the previous figure), and her usual long pigtail which curls over at the end. Behind her is a bearded divine figure, with the right arm bare, and a long garment which reaches to the feet, hanging from the other shoulder and covering all the left arm except the hand: his hands are

clasped across his waist, somewhat as in the Tel-loh sculptures, except that the fingers of the outer hand fall over, instead of rising from under, the other hand. All the figures are barefooted; they have large noses and prominent eyes; and they wear their hair turned up in a large roll behind, except the two porters, whose hair hangs down behind over their shoulders. The relief of the figures is as much as 2 or $2\frac{1}{2}$ millimeters. The lower edge is square and rather thick, as if the cylinder was meant to stand on it, while the upper part is reduced to a thin edge. The right-hand gate has been partly corroded away by water, as also a portion of the male head near it. Two small pieces near the top were broken off long ago, but what is missing is of no special importance. The inner surface shows the tool-marks, which run longitudinally, proving that it was not turned out on a wheel. The entire surface without and within was coated with black paint, or bitumen, of which considerable patches remain: it must have considerably marred the finish of the work, which was quite good.

This object has a very special value in the study of Babylonian mythology. In this JOURNAL (vol. III, pp. 50-56), I published a paper on *The Rising Sun on Babylonian Cylinders*, in which I showed that the scenes in which George Smith thought he saw the building of the tower of Babel are really representations of the sun-god coming out of the gates of the morning, and either stepping up over a mountain or lifting himself by his two hands placed on mountains on each side of him. I then quoted from Babylonian hymns to show that this scene is abundantly described. I also expressed the opinion, which it was impossible to prove, that we have a conventional later form of the sun-god on those common hematite cylinders of a little later period which give us a bearded deity in a long robe, with one bare leg extended and the foot resting on a stool, and generally carrying a weapon like a notched sword. We here have full proof that this conjecture was correct. Here we find this common form of the god with the foot raised, and connected for the first time with the two gates and the porters. There can be no question of the identification; and I am the more convinced that the flounced goddess who here, as so often on the seal-cylinders, accompanies him is his wife Aa, though I admit that the various goddesses were not much differentiated in art, and that this same form was probably employed to represent Sala, the wife of Ramman, and perhaps the wives of other gods.

There are no sure means of settling the age of this cylindrical object; but the archæologic indications, in my mind, point to a very

early date. Hitherto, the gates with the sun-god have been found only in the archaic Babylonian period; but here we have what appears to be a transition from this to the later form which is found on the cylinders which date, according to Pinches (*The Babylonian and Assyrian Cylinder Seals*, pp. 7, 8) from 1500 to 2500 B. C. There is nothing in the art of the relief under discussion which would forbid us dating it from this early period of about 2000 to 2500 B. C.; indeed, the peculiar style of *chevelure*, or, rather the two styles—one that of the porters, in which the hair hangs down the neck, and the other, that in which it is arranged in a large fold or knot, behind—are, I think, characteristic of a period which approaches the archaic. I confess that I am inclined to make this object, on archæologic grounds, as old as two thousand or more years B. C. I regard it as a purely Babylonian product, which was conveyed, probably in some conquest of a very early period, to this distant land of the Minni.

X. TIAMAT AND OTHER EVIL SPIRITS, AS FIGURED ON ORIENTAL SEALS.

The conflict between Bel-Merodach and the dragon Tiamat is very frequently figured on the Assyrian seals, but not, so far as present knowledge goes, on the Babylonian seals. The typical Assyrian form is that which appears in Smith's *Chaldean Genesis*, p. 114, which represents the god armed with his scimitar and pursuing, at full speed, the composite monster, who, when escape is impossible, rises upright on her hind feet, apparently halting and turning about to resist the attack. Tiamat appears, as in the larger and more elaborate representations on the palace-wall of Nimrûd, in her conventional form, with the head, front legs and feet of a lion, short square wings, the body covered with feathers, a short fan-shaped tail, and the hind legs and claws of a bird of prey. This type of griffin, or rather chimera, is very marked and characteristic. On one cylinder, however, belonging to Mr. F. W. Williams of New Haven, the dragon becomes a real serpent (PL. XVIII-2). In the later cylinders of Assyria, or still later in the time of the second Babylonian Empire, or the Persian Empire, we find that Tiamat is replaced by various human-headed sphinx-like figures, or even by birds. Indeed, there are so many transitional forms, before we come to the characteristic Persian representation of the divine hero fighting a lion, that it seems as if there resulted a confusion between the idea of Bel-Merodach fighting the dragon, and the conflict of Gisdubar and Ea-bani with the lion and the buffalo.

There is, in some of these representations, a feature that needs a consideration which it has not received; that is, the smaller griffin, or chimera, which appears between the legs of Merodach, also swiftly pursuing Tiamat. It appears in its most perfect form on an Assyrian serpentine cylinder belonging to me, which is the finest representation of this scene, in its original form, that is known to me (PL. XVIII-3). Another extremely fine specimen, belonging to Mr. R. S. Williams (of Utica, N. Y.), figured in this JOURNAL (II, PLATE V-8), is cut in chalcedony, but, being wrought in part with the wheel, is less defined in some of the outlines. Other good specimens are found in Lajard, *Culte de Mithra*, XXXIII-4, XXXVII-4. It is evident that this smaller dragon is one of the allies of Merodach, not of Tiamat. It is evidently running at full speed, with the legs thrown forward and the back at full length, the mouth open and the tongue thrust out, as in the case of the larger dragon. It is not lying prostrate, as appears by comparison of this and the Williams cylinder. It is to be explained from the story of the conflict between Merodach and Tiamat found in the fourth tablet of the creation-series. After the description of the arming of Merodach, which I will quote later, we read:

"He created the evil wind, the hostile wind, the storm, the tempest, the four winds, the seven winds, the whirlwind, the unending wind; he caused the winds he had created to issue forth, seven in all, confounding the dragon Tiamat, as they swept after him."

Later, when the conflict was joined, we read:

"The evil wind that seizeth from behind he sent before him;
Tiamat opened her mouth to swallow it;
he made the evil wind to enter so that she could not close her lips.
The violence of the wind tortured her stomach, and
her heart was prostrated and her mouth was twisted."³

Here we have a troop of evil winds created to accompany Merodach and aid in his attack. In the story of the attack, the wind becomes singular: "He made the evil wind to enter." In reducing the story to a design for a cylinder, all the evil winds could no more be pictured than all the weapons with which the god armed himself. Only one weapon is usually given, the straight-handled scimitar, or sickle, the "weapon unrivalled" of the poem. We may, with considerable confidence, conjecture that the horrible composite monster who accompanies Merodach is this "evil wind" similar in race to the evil Tiamat, and represented in the same fashion. A well-known winged statuette

³ SAYCE, *Hibbert Lectures*, pp. 381, 382.

representing the evil southwest wind (Perrot et Chipiez, II, p. 496) mingles human with animal and bird characteristics, and belongs to another type. A similar form for an evil spirit is used also for the death-demon on the back of the bronze funeral-tablet described by Clermont-Ganneau (Perrot et Chipiez, II, pp. 363-4).

I have remarked that the representation of the fight between Merodach and Tiamat does not emerge in art until the Assyrian period, and I have been sometimes inclined to believe that the myth, as told in the fourth creation-tablet, was of a comparatively late origin. Nevertheless, it is to be remembered that the dragon is not unknown to Babylonian art: perhaps a dozen or more cylinders are known in which it appears, in an upright position, and in no special relation to other figures on the cylinder, unless its open mouth sometimes seems to threaten a human figure before it, or, as in one or two cases, it is in an attitude of conflict with another figure.⁴ The dragon-form is perfectly distinct and marked: the lion-head, the wings, and the feathered hind-legs, and eagle-claws. There can be no mistake about its being the same form of dragon as Tiamat in the representation of her conflict with Merodach. Nevertheless, as we have already seen that the evil wind may be represented under the same griffin-form, the evidence, that it is really Tiamat, is less complete than we might desire. We can only say that these cylinders make it probable that Tiamat is a factor in the Babylonian as well as in the later Assyrian art.

But we now come to another cylinder (PL. XVIII-4), an impression of which has lately come into my possession, and which is the immediate occasion of this paper. It is a large cylinder of shell, 33 millimeters in length and about 20 mm. in diameter. On it is a very spirited design, so far as I know, quite unique in Babylonian or Assyrian art. It represents a god, standing in a four-wheeled chariot and holding the reins in his left hand, while the body is bent backward and the raised right hand holds, in the air, a whip with which he is about to strike. He is clad in a long, flowing garment, which plainly covers his body from the waist down, but it is not clear that he wears any garment on his arms or the upper part of his body. His beard falls on his breast, and he wears the low, two-horned cap, or turban, worn generally by the gods. The pole of the chariot rises

⁴ A characteristic example is given in MÉNANT, *Recherches sur la Glyptique orientale*, fig. 96; see also my article, "Human Sacrifices" on *Babylonian Cylinders*, JOURNAL, vol. V, p. 35, fig. 8.

almost vertically from the axletree, and then gently descends till it reaches the neck of the creature drawing it. On the left of the pole is a chimera or dragon, the possible mate to it on the right not being drawn. It is similar to the regular conventional form of Tiamat, familiar in Assyrian art, and very much better drawn, with more life and feeling, than the Babylonian forms of the dragon on the hematite cylinders. It is walking forward, an attitude not appearing elsewhere. It has the head, body, front legs and feet of a lion; two wings, short and square, arising from its shoulders; a short, fan-shaped tail, feathered hind-legs, and the feet of a bird of prey, with the claws reaching forward and back. The head, somewhat depressed, with the mouth wide open, and with what looks like a long forked tongue or a double stream reaching from the mouth to the ground, gives the monster an attitude of unwilling subjection. We have here another remarkable example, showing how much better the artists drew the animal than the human figure. Between the wings of the dragon rises a female figure, who might be standing on the front part of the pole of the chariot or on the animal's neck. She is nude, with the body in side view, except the breast. On her head is the low, two-horned cap, and her long hair falls behind her shoulders as far as her elbow. Her two hands are raised, and each holds by the middle an object consisting of three waving lines, doubtless meant to represent the forces of nature—lightning and storm. Directly in front of these divine figures which I have described, and facing them, is a human worshipper, pouring out a libation by an altar. His head is bare; he wears a simple robe reaching to his ankles, holds his right hand across his waist, while the extended left hand holds a vase, out of which a slender stream falls to the ground between the altar and the monster drawing the chariot. The altar is rectangular, with a height nearly double its breadth, and the upper-front corner cut out so as to make a step or shelf. On the altar are two lines, apparently representing thin loaves of bread. The whip of the god in the chariot extends back so as to be over the head of the worshipper.

This extraordinary cylinder has no parallel, to my knowledge, and it is important to learn its period and its meaning. The material of the cylinder is shell, the central cone of one of the helix shells of the Persian Gulf. So far as I know, this material was never used except in the more archaic period. From it are made large thick cylinders of the same size and shape as the archaic Babylonian cylinders of serpen-

time or other harder stone. The material and shape are almost conclusive that this cylinder also is archaic, that is, of a period of from 2500 to 4000 B. C. With this agrees the form of the altar, which I have never seen except on an archaic cylinder. It is to be found on a seal figured in Ménant, *Glyptique Orientale* (I, p. 163), and on another cylinder now belonging to the Metropolitan Museum, figured by me in a paper on *A Babylonian god of Agriculture*, in this JOURNAL (vol. II, p. 263). Besides this old form of altar, the figures of the god in the chariot and of the worshipper are characteristically archaic.

But we must turn to those elements which are unfamiliar and new. On a number of other cylinders we have chariots drawn by animals, but none of them, apparently, are archaic Babylonian. Such cases are found in Ménant, *Pierres Gravées*, II, pp. 75, 82, 120, 166; Lajard, *Culte de Mithra*, XLI, 3; LIV, B, 10; Cullimore, *Oriental Cylinders*, No. 6; and De Clercq, *Catalogue Raisonné*, Nos. 284, 286, 287, 310 (some of which are duplicated). All these are as late as the Assyrian or even the Persian period, and not one has a four-wheeled chariot of this shape. In Assyrian art, the chariot is two-wheeled and the wheels are spoked, while these are evidently solid. Both the body and pole of the chariot are peculiar, and, so far as I know, unlike those of any later chariot that has been figured.

The nude female deity, rising between the wings of the monster drawing the chariot, is also unique. The fact that she is nude suggests antiquity, as we know that at a quite early period even Gisdubar, who is nude in the more archaic cylinders, becomes decently clothed. The only known form of a nude goddess is that of the goddess whom Lenormant calls Zarpanit, and Ménant calls Beltis, represented with arms across her breast, and in front view. This, if the same deity, is in an entirely different attitude. I have already said that her head-dress is of an ancient type. She holds in each hand the object already described as formed of three waving lines, which is evidently a representation of lightning. Its identification with the lightning can be proved by a glance at the figures of Ramānu, the god of the atmosphere, who holds in one of his hands a symbol of lightning similar in shape: beside the many seal-cylinders with this representation, the most important example is perhaps that in the Malthāi relief (Perrot et C., *op. cit.*, fig. 313) in which the forks are distinctly wavy. That it is a weapon, would be suggested by comparison with the famous great figure of Bel fighting the dragon, from Nimrūd, figured in Lajard, *Monu-*

ments (second series, pl. v). In that figure, the god's sword and scimitar hang by his side, and he holds in each hand (as this goddess does) a double trident consisting of three waved prongs, just like this we are considering, except that in the middle, where the hand grasps them, the three as held by Merodach are reduced to a single connecting rod or handle. We can hardly go astray in supposing the weapon to be the same, but the simpler form on our cylinder suggests greater antiquity.

We now come to the monster drawing the chariot. It is as fully developed as on the Nimrûd sculpture just mentioned. I confess that I am startled to find it in this form, especially as I had come to think it was to be found, in Babylonian art, only in the upright, crabbed, conventional form on the hematite cylinders. But, even here, it must be considered that these hematite cylinders are among the older of the class, and that there must have been a free unconventional prototype for the established conventional form. Perhaps some of the best illustrations of the conventional upright dragon on the hematite cylinders are found in De Clercq, *op. cit.*, figs. 73, 74, 75, 76. In figs. 73 and 75, the dragon is attacking a cowering kneeling human figure; in fig. 74 it is fighting with a lion; and, in fig. 76, it is fighting with Eabani. These are among the freer ones of this form, and they are all on the short, thick hematite cylinders which are the oldest of this material, and form the connecting link between the slender hematites of the second period and the thick shell, serpentine and jasper cylinders of the earliest period. The very freedom and strength with which the design is drawn on the cylinder now under consideration is evidence of its archaic character. It is well known that the oldest cylinders are drawn with the most liberty and vigor: they far excel the later Babylonian ones in composition and attitude. On this cylinder, the god holding the whip, the goddess with the weapon in her hand, and the monster drawing the chariot are all drawn with a freedom which allies them, in artistic style, with archaic examples of the art; and this only confirms, what seemed proved by the material and shape of this cylinder, that we have here a precious example and a very ancient illustration of a mythologic scene from Southern Babylonia.

What, then, does it represent? It is a god, in a chariot drawn by a composite monster of the Tiamat type, and accompanied by a goddess carrying weapons of conflict. This is the mythologic group before which the worshipper pours his libation. I venture to see in this group the god Bel-Merodach going forth to conflict, or possibly

returning from it. Now let me quote the passage from the fourth tablet of the creation-series describing the arming of Merodach :

"They [the gods] gave him a weapon unrivalled, consuming the hostile :
 'Go (they said) and cut off the life of Tiamat ;
 let the winds carry her blood to secret places.'
 They showed his path and they bade him listen and take the road.
 There, too, was the bow, his weapon (which) he used ;
 he made the club swing, he freed its seat ;
 then he lifted up his weapon (which) he caused his right hand to hold ;
 the bow and the quiver he hung at his side ;
 he set the lightning before him ;
 with a glance of swiftness he filled his body.
 He made also a snare to enclose the dragon of the sea.
 He seized the four winds that they might not issue forth from her,
 the south wind, the north wind, the east wind (and) the west wind.
 His hand brought the snare near unto the bow of his father Anu.
 Then Bel lifted up the hurricane, his mighty weapon.
 He rode in a chariot of destiny that fears no rival.
 He stood firm and hung the four reins at its side."⁵

Our cylinder seems to give us Bel-Merodach in his chariot, riding forth armed to the conflict. He is drawn by a monster like that which on later cylinders accompanies him, and which I have identified with the evil wind. "He set the lightning before him" says the poem : and here the goddess, who precedes him, is armed with the lightnings, which in other figures the god himself hurls ; and, indeed, on some cylinders (PL. XVIII-3) the arrow with which he shoots Tiamat is pointed with a trident, identifying the arrow with the lightning. This triple-waved line is the chief element in the trident-weapon generally carried by a god who often leads a bull by a rope, but sometimes leads a winged dragon of the form now under discussion, as in Lajard, *op. cit.*, XXXVII, 1 ; see, also, my article on "*Human Sacrifices*" on *Babylonian Cylinders*, JOURNAL, vol. v, fig. 19.

If our deity in the chariot be Merodach, the goddess who accompanies him is his wife, Zarpanit. She is also known under an old name Gašmu, and may be a form of Belit. I have said that the frequently-appearing nude goddess, with arms akimbo and in front view, is identified by Lenormant with Zarpanit, and by Ménant as one of the confused forms of Belit-Ishtar. I can hardly doubt that we have here one of the early, free forms of Zarpanit, wife of Bel-Merodach, which later were conventionalized and fossilized into the front-view, nude

⁵ SAYCE, *Hibbert Lectures*, pp. 380-1.

goddess, with arms across the breast, which so often appears on the cylinders.

We have, then, in this cylinder, one of those precious early examples of Babylonian art, when mythologic designs were in the formative period, when full pictures were made and the artist's originality had not yet been reduced to the reproduction of conventional symbols and hints. It is these early cylinders that will bring us most fruit for our study ; and this one gives, apparently, an episode in the story of the beneficent demiurgic Bel-Merodach, and shows him to us riding out to conflict with the powers of darkness and disorder, and accompanied by his wife Zarpanit, carrying his weapons, and by the monsters of the air which he tamed to his service.

WILLIAM HAYES WARD.

INTRODUCTION OF GOTHIC ARCHITECTURE
INTO ITALY
BY THE FRENCH CISTERCIAN MONKS.

II. THE MONASTERY OF SAN MARTINO AL CIMINO NEAR
VITERBO.

[PLATES XIX, XX.]

HISTORY OF THE MONASTERY.—On one of the ridges of the classic Mons Ciminus, about eight miles from Viterbo, stood a monastery founded by the Benedictines at an early date.¹ It was then connected with the important monastery on Monte Amiata,² and more than one document in the archives of Orvieto attest this fact. Little is known of its early history :³ its interest for us commences when it was handed over to the Cistercian order in such a state of ruin and desertion as to be uninhabitable. The order appears to have demurred at the idea of maintaining its languid existence, for it was at a time when the attempt was being made (in 1151) to curb the injudicious, almost intemperate, spread of the order by the foundation of a great number of unnecessary monastic establishments.⁴ In this, as in many other cases, Papal insistence finally prevailed, and in 1206, according to Ughelli, the monastery was occupied by Cistercian monks from Pontigny. A few words regarding this fact, well known in monastic annals, will give a good basis for a judgment on the date and origin of the buildings whose description is to follow : it is condensed from Ughelli, *Italia Sacra*, t.

¹ A page is devoted to the monastery, by Cav. R. OJETTI, in the *Mostra della Città di Roma* (1884), pp. 153-4. These remarks are, however, founded on nothing but drawings of the façade and apse, the two parts of the church that do not belong to the original structure.

² JANAUŠCHEK, *Orig. Cisterc. tom. I*, p. 231.

³ "From a parchment of 1066 and another of 1044 from the archives of *S. Martino in Montibus* or *al Cimino*, now transferred to the archives of the Vatican, as is noted by GARAMPI (*Iter Viterbien. advers.*, vol. III, No. 135, *MSS. Arch. Vat.*), we find that the Benedictines of *S. Martino al Cimino* had at that time jurisdiction over the church of *S. Pellegrino*, around which were some possessions of that Abbey and of *S. Giovanni in Cocciola* or *Ciocola* : " CRISTOFORI, *Le tombe dei Papi in Viterbo*, p. 6.

⁴ DOHME, *Die Kirchen des Cistercienserordens in Deutschland*, etc., p. 18.

1, c. 1403-4,⁵ with reference also to Janauschek (*Orig. Cist.*, t. 1, p. 124),⁶ and the authorities which he there quotes.

It was in 1150 that Pope Eugenius III gave the monastery to the Cistercian order, by which it was placed under the jurisdiction of St. Sulpice in Savoy, one of the main offshoots of Pontigny. This connection with St. Sulpice lasted for over a half-century without producing any improvement in the condition of San Martino. The general chapter of the order consequently determined to cut off all connection with it. It was then that Innocent III came to its aid. From his letter, published by Ughelli, we learn that the monastery was in abject poverty and contained but three monks. The Pope,

⁵ *Hac tempestate* [time of bishop Gensoni of Viterbo, 1149-79] *ac Petro Praesule vetus monasterium S. Martini Ord. S. Benedicti in montibus Cimini octavo ab hac urbe lapide, alieno aere oppressum, et fere ad nihilum redactum, Eugenius III monachis Cisterciensibus reformandum et incolendum tradidit. Verum cum sub Innocentio III ad extremam paupertatem redactum esset, generale capitulum Cisterciense (ut MARIQUEZ scribit in Annal. Cist. Ord. tom. 3) atque Innocentius ipse zelo inter se religionis decertarunt: illud, dum penitus deserere statuit, quod non poterat in observantia conservare, hic cum conventum de novo illuc adducit; et liberandis oppignoratis fundis mille libras argenti, augmento dotis ecclesiam integram donat; ex quorum fructibus ibidem sustentarentur. Constat utrumque ex ejusdem Papae litteris expeditis anno 1206 ad Petrum abbatem, fratresque, qui tunc recens venissent ex Pontiniaco Galliae ejusdem ordinis coenobio, in hunc modum ex Reg. Vatic. Nicolai IV ubi Innocentii litterae confirmantur.*

⁶ *Illustre illud asceterium in cacumine montis Cimini, terra Viterbiensi et patrimonio S. Petri situm nullique dioecesi subjectum, perantiqua familiae Benedictinae sedes erat, cujus restaurator jam Gregorius VII fuisse traditur. Quum autem saeculo XII aere alieno reddendo impar et fere ad nihilum redactum esset, ab Eugenio III P. M. a. 1150 monachis Cisterciensibus e S. Sulpitio (de linea Pontiniaci) advocatis reformandum traditum est (Bi. Pa. Ha. M. Du. V. Vi. N. W. Bl; 1149: A. R. E. E. M. L. La.). De antiquioribus abbatibus nil constat; unius sine nomine memoria in statuto XI capituli generalis a. 1193 occurrit.*

Verum quum enormia quibus illa abbatia laborabat damna a Sulpitiensibus omnem industriam adhibentibus per L annos reparari non potuissent et capitulum generale eam deserendam esse constituisset, ex Innocentii III imperio Pontiniaco resignata est, quo facto novus conventus Petro abbate duce inde emissus S. Martinum occupavit eumque liberalissimis donis a dicto pontifice Cal. Febr. 1207 (perp. 1206) collatis adjutus ecclesiae et ordini Cisterciensi conservavit; ubi silentio praeterire non licet, Rainerium Capocium, cardinalem nostrum, de monasterii aedibus rursus aedificandis egregie promeritum esse. Quod ad tempus quo Pontiniacenses advenirent attinet, Moronus (quo teste nescimus) pro a. 1199 contendit, Jongelinus (JO. St. JC, Ve. Bo.), Historia Pontiniacensis, Chaillou pro 1200, Bl pro 1203, Na. F pro 1216 (alio loco, ubi S. Martinus perperam filia Vallis-Ecclesiarum vocatur, pro 1206); sed tamen considerantes matris mutationem a capitulo generali a. 1207 approbatam esse, porro Ughellum ex codice S. Salvatoris Montis-Amiatinae referre, conventum a 1207 advenisse, Innocentium III denique laudatas litteras eodem illo anno 1207 "ad Petrum abbatem et fratres qui tunc recens venerant" dedisse, eos initio a. 1207 S. Martinum ingressos esse recte aseritur.

however, promised many gifts if the parent monastery of Pontigny would consent to send there a colony, and if the general chapter would rescind its resolution to separate from it. Early in the year 1207, the colony from Pontigny, under abbot Peter, entered San Martino. Innocent III paid all its debts and endowed it, as Ughelli relates, and within a few years Card. Rainerius Capocci gave many gifts and enabled the monks, under his supervision, to rebuild the entire monastery. So generous was he toward it that he, rather than Innocent III, is regarded as the real founder. I will here repeat two extracts given by Ughelli from codices of the monastery of Monte Amiata that are almost contemporary with the event. A *chronicon* of the monastery says: *Anno 1199 Innocentius III sedit an. 18 m. 4 d. 22. Hic multa bona fecit. Hic renovavit monasterium S. Martini de Monte Viterbii et anno 1207 de Pontiniaco fecit conventum ibi venire.* Another codex, after reporting the facts mentioned above, adds: *Raynerius cardinalis noster non multo post tempore fere totum monasterium reedificavit et bonis multis locupletavit.*

Cardinal Capocci belonged to the Cistercian order, and when he became one of the leading ecclesiastics of his day never ceased to advance its interests with a strong and generous hand, until later in his life he transferred his favors largely to the new and more popular Dominican order, a fact which seems to have taken place before 1220. It was mainly through his influence and example that Viterbo became perhaps the greatest monastic centre in Italy during the first half of the thirteenth century. The construction of the buildings of S. Martino was one of his earliest undertakings, and we are led, without regard to the style of the construction, to date them between 1207 and about 1225: before the later date we find him erecting in Viterbo itself the monasteries of S. Maria della Quercia, S. Maria di Gradi, S. Maria della Verità, and others; some of which were intended for the Cistercians, but all were finally handed over to the Dominican order, under the influence of his changed affections.

The old connection with the great monastery of S. Salvatore di Monte Amiata appears to have been retained, especially after it joined the reform, in 1228, and had brought under its sway a number of churches in Viterbo and its vicinity.⁷

MONASTIC BUILDINGS.—The buildings that remain from the old monastery date back to the time of Innocent III and Cardinal Capocci,

⁷ JANAUSCHEK, *op. cit.*, p. 231; CRISTOFORI, *op. cit.*, pp. 5, 7, 9, etc.

and show it to have been an establishment of considerable size and importance; almost a rival to the more southern colonies of Casamari and Fossanova. All but the church and chapter-house are in a ruinous condition, owing principally to the construction, on the site, of the great Pamphili palace. In 1564, the monastery had become extinct, and the property passed into the possession of the Vatican chapter. Toward the middle of the XVII century, it became the property of the Doria family, who are still its owners. Donna Olimpia Pamphily, sister-in-law of Innocent X, who died in 1657, made the site her favorite residence. She built a great palace within the former precincts of the ruined monastery, restored the church in the *barocco* taste of the time, and was buried there, as is shown by two inscriptions, one placed over the door of entrance, the other in the pavement in front of the high altar.

The area of the monastery not occupied by the palace is mainly filled with humble dwellings, built partly among the mediæval ruins, and, in some cases, leaving the old structures intact: some are even attached to the walls of the side-aisles of the church.

CHURCH.—Contrary to the usual Cistercian custom, the church is placed to the right of the monastic buildings. The façade is badly restored. Its general design can still be discerned in the central portion, especially in the portal, but the restorations have been so radical as to obliterate nearly all traces of the original work. It is divided vertically into three sections. In the centre is a round-headed portal surmounted by a gable, with a single column on either side; above it is a large false pointed arch reaching up to the gable, in the summit of which is a modern rose-window. Above this gable is a part of the ancient façade, with a round-headed window and a false horizontal termination. On either side, over the aisles, rises a tower in three stories, only the upper one being provided with windows. These towers are of late work, and the church did not originally possess any.

The interior (PLATE XIX) has remained practically unchanged in its lower portion. A few *barocco* altars were set up in the side-aisles by Donna Olimpia, thus closing their windows, and the beautiful tone of the peperino stone was covered with a coat of whitewash. The apse was disfigured by a coat-of-arms and some pallid decoration in fresco.

It is interesting to compare this interior with that of Fossanova and also with the French transitional interiors. Some twenty years or more intervene between Fossanova and San Martino; and the changes that had taken place in France during this time are clearly reflected in the

latter of these two buildings. The Cistercians of Pontigny had been influenced by the transitional buildings of the Ile-de-France erected shortly before 1200; and in this case they carried out what was perhaps the favorite type, that in which piers alternate with columns along the nave. This church of San Martino is as truly built by French architects and in an unadulterated French style as is Fossanova; but the style is less severe; it is less Cistercian, and conforms more to the type of the Ile-de-France; the prototype is not Clairvaux but Pontigny—for each of the four main foundations of Citeaux seems to have possessed a variation of the general architectural type.⁸

San Martino is lighter in its proportions, and yet, instead of showing increased height, we find that its main nave is broader in relation to its height, and this must have been still more marked before the vaults were raised. A consequence is the omission of the row of small windows between the arcades of the nave and the clerestory, and a consequent diminution in the slant of the roof of the side-aisles. There is also a diminution in the verticality of lines, owing to the system of vaulting. The alternation in the supports was intended, of course, to provide for the sexpartite vaulting, as at Notre Dame, the choir of Senlis, and the cathedrals of Mantes and Laon; but this original intention was here either lost sight of during the construction, as in the naves of the cathedrals of Senlis and Noyon, or a quadripartite vaulting, like the present one, was a later substitution.⁹ Thus, we find, at present, an engaged colonnette rising only from the heavy piers. The result of this is to make the present vaulting of the nave nearly square and of proportions similar to those of the aisles. There is hardly any domical character to the vaults, through the lightness and circular form of the transverse arches. The supposition that it was the original intention to use sexpartite vaulting is confirmed by the size of the windows and by a couple of the original intermediate vaulting-shafts which were left on either side in the further bay of the nave. Of the present windows, those over each column were evidently cut at the time of some restoration of the church, and involved the closing of the two original windows placed on either side of these columns over the point of each arcade and the demolition of the buttresses on the exterior that corresponded to the intermediate column. This probably

⁸ See ground-plans in VIOLETT-LE-DUC, *Dictionnaire*, vol. I, under *Architecture Monastique*.

⁹ In most transitional churches in France the supports and the present vaulting do not correspond, on account of the substitution of quadripartite for sexpartite vaults, or vice-versa.

coincided with the raising and rebuilding of the vaults and changing them from the sexpartite to the quadripartite form. On account of the transept, the new windows in the furthest bay were opened not in the centre but to one side of the new vaults, and this led to the preservation of the vaulting-shafts which were removed in every other case. Traces of the early windows that have been closed can yet be seen, and the late date of the present vaults is proved, not only by the character of their mouldings but by the additional height given to the wall, which is so noticeable on the exterior. In some cases, however, several courses of the original vaulting-mouldings have been sufficiently preserved to show that the wall or longitudinal ribs sprang from a greater height than the diagonal and transverse ribs, and that both the latter are nevertheless much stilted. There is a lack of structural logic and continuity in this system of San Martino as it originally existed. The vaulting-shafts do not spring from the ground, in the case of the main piers, or from the capitals of the intermediate columns, but from the clerestory cornice. They here rest upon a single shaft¹⁰ of the same size as that engaged in the pier. This shaft ended in a typical Cistercian consol over each column and directly on the capital over each pier, without the intervention of any base.

The mouldings of the main arches and its supports are original, and are far in advance of those used in the other Cistercian buildings of the time in the Roman province, being analogous to the mouldings of the transitional buildings of the Ile-de-France. The same cannot be said of the foliage of the lower capitals, which is lacking in delicacy. The capitals of the intermediate shafts are slightly more advanced; they are triple, and thus form a somewhat awkward transition from the quintuple vaulting-mouldings above to the single shaft below.

The ground-plan (PL. XX) shows eight bays in the aisles and four double bays in the nave; a transept with two square chapels on either side; and a pentagonal apse instead of the usual square end. The side-aisles are square, measuring 4.15 met. between the axes; the width of the nave is 8.75 met.; the total length is about 57 met. in the interior. The dimensions are thus a trifle less than those of Fosanova; the walls are not as thick, nor the supports as heavy, but the span of the arches is slightly greater, thus producing greater height

¹⁰ The wall is coated with a thick layer of plaster: it is possible that a slender shaft once existed on either side of the main one, corresponding to the small capitals under the cornice, and that it has been covered by the plaster. I did not think to examine this point when on the spot.

and lightness of the side-aisles. The simple ribbed cross-vaults of the aisles appear to be original, and are supported along the wall by a half-column engaged in a pier. The aisle-windows are now closed. The five-sided choir is of later date than the rest of the church, and may have taken the place of an original square end. Its construction is assigned by Signor Ojetti to the XIV century, without any proof. It was probably built at the same time that the vaulting and windows were remodelled. An examination of the exterior is not conclusive, but it proves (1) the raising of the vaults of the nave; (2) the partial rebuilding of the side-chapels and of a part of the transept, at the time of the reconstruction of the apse; (3) that the vaults of the transept are the only original high vaults that remain.

A comparison of the capitals and mouldings with those of French churches shows them to belong to the time when the transitional forms were passing into those of developed early Gothic. The outlines of the bases are very similar, for example, to those of Senlis, but they are much higher and heavier in relation to their shafts than those of any French church with which I am acquainted. They are of unequal height; those near the door being lower than the rest, as may be seen in the foreground of *PLATE XIX*.

CLOISTERS.—The arrangement of the monastery is somewhat peculiar, probably being influenced by that of the earlier Benedictine structures. The Pamphili palace has absorbed the front section with its dormitories and one side of the main cloister, whose foundations are still visible in the cellar of the palace. A sketch in *PLATE XX* gives all that could be ascertained, by a cursory examination, of the general plan. The main walls are almost everywhere preserved, but the details of exterior and interior have been ruthlessly made over: the monastic halls have been turned into shops and peasants' dwellings and store-rooms. At many points, the original round-headed windows remain; most of them are single, some double with a dividing shaft. There appear to have been two cloisters, both now destroyed. The north arm of the monastery, projecting from the transept of the church, is fairly well preserved. A corridor with cross-vaults has on either side one or more early rooms, those nearest the church being probably the treasury and sacristy. Then comes a section at right angles and parallel to the church, which formed, apparently, the division between the two courts or cloisters. At the corner of the second court, on the east side, is the chapter-house, which is locally termed the refectory, still in fair preservation.

CHAPTER-HOUSE.—The chapter-house corresponds in style to the church. It is even lighter and more graceful in comparison with the corresponding chapter-houses of Fossanova and Casamari, and it approaches far more the style of some French refectories and other halls of the XIII century. It measures 20 by 9 metres, and is divided into two aisles by three central piers. These piers are of the same general plan as those of Fossanova and Casamari, a central cylinder or octagon around which are grouped eight shafts, upon whose capitals rest the mouldings of the vaults. But the æsthetic effect is here made quite different by the greater slenderness of the pier and delicacy of the mouldings, as well as by the wider spacing of the supports. The consols that support the arches against the walls are of a charming acorn-shape design, and the mouldings of the arches are quite advanced in style. A round-headed window was originally placed in each bay, but, of these eight, nearly all are closed. A stone bench encircles the entire interior. The plan and view of the interior (PL. XX) will make a long description unnecessary.

Although this is, according to tradition, the refectory, it appears to me, for various reasons, to be the chapter-house: *first*, its position in the arm of the monastery, that is, at right angles with the transept of the church—the usual place for the chapter-house in Cistercian establishments; *second*, the analogy of form and construction to many other chapter-houses of the order, and its dissimilarity to the majority of the refectories of the order; *third*, the row of stone seats which surrounds the hall, as in all chapter-houses.

The monastery of San Martino does not present the diversity of style which we find at Fossanova and Casamari. It was built *d'un seul jet*, within the space of not many years. The date of 1207 is the earliest we can assign to the plan and foundations: the presence of round-headed windows everywhere forbids our giving a long *terminus ad quem*. Probably the construction was finished in about 1225.¹¹ Any earlier date than this would be in contradiction with the extremely rich mouldings of the ribs and cornices of the church, which correspond with those of French buildings usually dated from 1210 to 1230. This advantage, however, is more than counterbalanced by the fearful mutilations which it has suffered.

A. L. FROTHINGHAM, JR.

¹¹ CRISTOFORI (*op. cit.*, p. 9) gives the date 1228 as connected with the church, but without any indication of what it applies to.

NOTES ON ROMAN ARTISTS OF THE MIDDLE AGES.

II. ARCHITECTS.

[PLATE XXI.]

During the summer of 1889, I spent several weeks in exploring the Roman province for the study of its inedited monuments. Although expecting to publish, before long, a study on the subject of the mediæval artists of this region, I will here describe the works of some architects whose names, so far as I know, are new.

MARTINUS.

This Martinus is an architect of the twelfth century, and, judging from the style of his work, he may be considered to have been one of the best. His inscription is on the porch of the church of Sant' Erasmo at Veroli, the ancient Verulæ. This city of the Hernici, like its neighbors Anagni (Anagnia), Alatri (Aletrium), and Ferentino (Ferentinum), was among the cities of Campania that remained throughout the Middle Ages under the direct control of the Popes. The art of these cities is strictly Roman, except in cases of some strong local influence like that of the great neighboring monasteries of Casamari and Fossanova. At Segni, Anagni, and Ferentino are still records of the activity of the Roman families of artists in the XII and XIII centuries, the Cosmati, the Vassalletti, and the school of Paulus. To these should now be added Martinus. Some years ago, I had a photograph taken of the Romanesque porch of the church of SANT' ERASMO AT VEROLI (PL. XXI). Again, last summer (1889), I passed through this mountain village, and, while resting the horses, sat on the parapet in front of the porch admiring its strength and simplicity, the harmony of its proportions and tone. The sun was shining at such an angle that I noticed, for the first time, some letters cut in the second row of stones under the cornice, between and above the left-hand and middle arches of the porch. The characters were large and carefully cut in the pure classic style of about the middle of the XII century, and read: *EST MANIBVS FACTVS MARTINI QVEM PROBAT ARCVS*. Two facts are evident: (1) Martin

was proud of his work—the porch, which he calls *arcus*, he evidently regards as a good example of his style; (2) he considered that he had a style of construction peculiar to himself, for he says that this work can be recognized as his by its style.

The porch consists of three round arches of unequal span and height, corresponding to the three aisles of the church. Of the church itself I need not speak, as it is quite modernized; and I will omit the tower also, which, though mediæval, seems to be by another architect. A second story, with three round-headed windows, was added to the porch at the time of the restoration of the church. A flight of steps leads from the street to a platform from which one enters the porch by four steps; three more lead into the church. The dimensions of the porch are approximately as follows: length, 31 ft.; width, 14 ft.; height, 26 ft. The interior consists of three simple unribbed cross-vaults on a square plan, separated by rather heavy *arcs-doubleaux* which rest upon engaged columns with composite capitals attached to the outer piers, and upon simple pilasters. The central arch, corresponding to the nave, has of course a greater span than the side arches, but these, also, are unequal in size, that on the left being much the lower and narrower. The cause of this seems to have been the lack of space on that side.

Two points of detail are especially to be noticed: (1) the profiles of cornice and mouldings, and (2) the style of the decorative sculpture. The use of a retreating arch in interiors was common with architects of the Roman School, and it is also to be observed in the buildings erected in this region by the Cistercian order between about 1175 and 1225. Here we see it. One naturally turns for comparison to the few porches of the kind in the province—at Casamari, Casauria, and Piperno. But here the profile is different, the two planes being connected by the soft flowing line of a concave moulding or scotia, instead of forming right angles. But in earlier buildings, slightly anterior, in fact, to the porch of S. Erasmo, we find the use of the double angular arch; for example, in the doors of the neighboring cathedral of Ferentino (end XI cent.), and in the windows of the cathedral at Anagni (middle XI cent.). In interiors, the same device was used to break the monotony of the blank walls. Earliest of all is the basilica of S. Elia, near Nepi, a work of the X or early XI century, where the arches are supported on columns. In the XII century, the columns are replaced by clustered piers, as in the cathedral of S. Maria di Castello at Corneto. There is nothing

remarkable about the heavy capitals or the profiles of the rather clumsy bases of the columns or those of the bases of the piers : of greater elegance is the cornice that frames the upper part of the porch. The taste of the artist shows itself in the form and decoration of the archivolts that frame the arcade. They are the key-note to the entire porch ; they give to it dignity and peculiar style, add breadth to the arches, help in the play of light and shade, and delight by the delicacy of their sculpture. The details of this decoration in the central archway is as follows. First, a row of trefoils connected by stems, every other one being reversed : a similar decoration, but more advanced and without reversal, is found in the main doorway of the cathedral of Civit  Castellana executed, in about 1180, by the Roman artists Laurentius and his son Jacobus. Next comes the familiar classic egg-and-dart moulding ; then, the equally familiar and classic pearl ornament ; and, finally, the row of cubes placed at intervals which on a somewhat larger scale was so popular an appendix to the under part of cornices, during this and the following century. A similar but less elaborate decoration encircles the other arches. All the elements are classic ; and the execution itself is worthy of an artist of the best period of the empire. With Martinus, as with the earlier Cosmati and the Vassalletti, the classic tradition was supreme ; and this is but another proof that it entered into the smallest details of their work. After examining these archivolts, it is safe to say that the engaged columns below are by another hand than that of Martinus.

The porch of Sant' Erasmo is, in my experience, the finest in Central Italy. With the exception of the numerous architrave porches of the Roman school with their Ionic columns and classic details, porches extending the entire width of the church are quite unusual throughout Italy, whereas in France, for instance, they are quite common. Italian architects were either satisfied with none, or confined themselves, after the fashion of earlier examples in Rome (Santa Prassede, *etc.*), to building out the central portal, as at Verona, Modena, Trento, *etc.* One has to roam over Lombardy and Tuscany quite generally before finding wide porches : perhaps the finest example is that of the Cathedral of Lucca added to the church in 1204. Monastic churches, however, were more likely to have porches : in France the closed porches of the Clunisian churches are almost as large as the body of the church. The Cistercian and Benedictine porches were more modest. Those of the second half of the XII century and the beginning of the XIII built

in this region are similar in general form to this one of Veroli, but all unite to differ in one respect: their central arch alone is round-headed, those on either side are pointed, being thus enabled to keep the same height while having a smaller span, corresponding to the narrower side-aisles. The Cistercian monastery of Casamari has a porch which dates from about 1203, if not earlier: the corresponding earlier porch at the monastery of Fossanova has been destroyed; but we can conceive what it was from a study of the porch of the cathedral of the neighboring Piperno, constructed, probably in imitation of it, by the architect Antonio di Rabatto, shortly after 1180. A few years earlier, a similar porch was built before the Benedictine church of S. Clemente di Casauria in the Roman Abruzzi. All of these are lacking in the peculiar qualities that form the charm of the *chef-d'œuvre* of Martinus, as it would be easy to show, were this the place to do so.

GRIMUHALDUS.

Crypts were even more important adjuncts to churches than porches, in this part of Italy, especially during the Romanesque period: this was partly on account of their frequency, partly by reason of their extent. In my study of the architecture of the XI and XII centuries in the Roman province, I found that the crypts were often the only part that remained of a church that had been torn down or remodelled by the vandals of the XVIII century. Though, at first sight, there is an apparent monotony in these crypts, a careful study cannot fail to reveal the individuality of each one. One of the largest and most interesting is that of the cathedral of Sutri. This church was the work of Roman architects, for the town is only about forty miles to the north of the Eternal city,¹ and the building still bears traces of their handiwork. An inscription of 1170 informs us that Nicolaus de Angelo, with his son, executed the high altar, probably, after the usual fashion of the Roman artists, with a beautiful decoration of mosaic-work. It is now destroyed: but a cornice with a XII-century inscription, mentioning the name of bishop Petrus, which I disinterred from the neighboring yard, may belong to it. At all events, the central doorway, with its mosaic-work, fragments of the old pavement, the campanile, and parts of old frescos, still remain of the XII-century work, after the usual process of destruction had been indulged in during the XVIII century. Fortunately, the crypt, though blocked up,

¹ See my article, *An early rock-cut church at Sutri*, JOURNAL, V, pp. 320-30.

was left untouched, and, as it was being re-opened at the time of my visit during the summer of 1889, I was among the first to descend into its depths. The only change it had suffered was the removal, at the demolition in 1743, of four of the columns to be placed in a chapel of the church above. I read the name of the architect upon the capital of the first column opposite the flight of steps that leads down from the left aisle: † GRMŪHALDV | PRB ◄ ACCOL'A, *Grimuhaldu presbyter accolyta*.

We do not meet with monk-artists nearly so often in Italy as in the rest of Europe, during the twelfth century; and the lay-artists had almost a monopoly, especially in this province, where they were formed

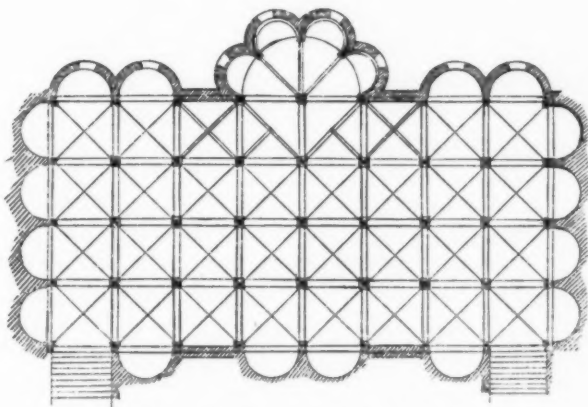


FIG. 1.—Ground-plan of the Crypt of the Cathedral at Sutri.

into regular schools. But here is an exception. A priest of the cathedral was also the architect of its crypt at the time when the entire edifice was made over about the middle of the twelfth century. This construction is so unusual in its form, is planned on a scale so large and sumptuous, and carried out with such care in its details, as to make it worthy of being placed in the front rank of Italian crypts (*Figure 1*). The vaults are supported by twenty-two columns, seven for each of the three rows that divide the crypt into four aisles, and one opposite the centre of the apse. Each aisle ends, not against a flat wall but in a small apse or semicircular niche. Four of these niches form the apse, and sixteen others surround the rest of the construction. This entire

arrangement of niches is singular and original : I do not remember to have met it elsewhere. The quadri-apsidal choir is also strange in a country which so staunchly retained the small and simple semicircular apse of the basilica, vaulted with its semi-dome. But this is not the only peculiarity. While all the rest of the spaces between the columns are covered with plain unribbed cross-vaults, the two opposite to the choir have tripartite ribbed vaults that join the quadripartite vault of the choir, which is also ribbed. This is an example of comparatively elaborate vaulting interesting for the time and region, as ribs were not used in this province, barring exceptions, until the latter part of the century. The vaults are all separated by transverse arches, and the columns are not waifs and strays from the ruins of older buildings, as is so often the case at this period : they are monoliths of good proportions and with fairly-carved capitals, of equal size, quarried for the building.

PETRUS GULIMARI DE PIPERNO.

The third architect on my list of inedited names is a native of the city of Piperno, the ancient Privernum, situated in the Monti Lepini in a region which before the Italian occupation was a centre of brigandage in the Papal States.² Only a few miles away, down in the marshy swamps of the valley below, was the largest and most famous of the Cistercian monasteries of Italy, Fossanova. Against the opposite range of hills are dotted several hamlets. Principal among these is the town of San Lorenzo, now called Amaseno. When Pope Innocent III, in 1208, visited Fossanova and the towns and monasteries on the opposite line of Sabine hills, Anagni, Alatri, Ferentino, Veroli, and Casamari, he also stopped for a night at San Lorenzo. Then, the present church was not built : this took place more than a half-century later. When the work was commenced we do not know, but it was finished in 1291 on the fourth of April, according to an inscription on the pulpit. The architects, as the inscription tells us, were *Petrus Gulimari* of Piperno and his two sons *Morisū* and *Jacobus*. The copy of the inscription, made for me by Sig. Ettore Maldura, reads in this way, but there seem to be some mistakes in the reading, several of which I have corrected, though I remain in doubt as to the reading of the artist's name. The entire inscription reads : IN NOMINE DOMINI AMEN ANNO NATIVITATIS EIVSDEM MCCLXXXI INDICTIONE

² See my article on *The Monastery of Fossanova*, pp. 14-46.

QVARTA MENSE APRILIS PONTIFICATVS DOMINI NICOLAI PAPAE IIII
ANNO QVARTO OPVS HVIVS ECCLESIAE ET ISTIVS PVLPI TVS COM-
PLETVM FVIT PER MAGISTROS PETRV M GVLIMARI DE PIPERNO ET
MORISVM AC JACOBVM FILIOS EIVS QVORVM ANIMAE REQVIESCANT
IN PACE AMEN.

The church is a simple three-aisled construction, with pointed arches and windows, unribbed cross-vaults, and simple square piers with engaged columns. It is the clearest possible imitation, on a reduced scale, of the great Cistercian churches of Fossanova and Casamari, and doubtless the architects took the former for their model. In fact, it is probable that they graduated from the Cistercian school of architecture, which spread over this entire region during the last years of the twelfth and the entire course of the thirteenth century. I shall not describe the church any further, in order not to forestall the details which will be in place in the volume on Cistercian architecture in Italy on which I am at present engaged.

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NOTES.

COMMENT ON TARBELL'S "STUDY OF THE ATTIC PHRATRY."

I desire to offer a few comments on Professor Tarbell's study of the Dekeleian Phratry-Decree, which appeared in the number of this Journal for June, 1889 (pp. 135-53). It should be pointed out that Köhler's restoration of the last two lines of *A* gives 31 and 29 letters in each, respectively, instead of 30, and is therefore possibly wrong. Pantazidis restores 30 letters to the last line by reading *ὁ ἱερὺς τοῦ Δεκελείων οἴκου*. τῷ Διὶ τῷ Ἐρκεῖφ and *ὁ ἱερὺς τῶν Δημοσιωνίδων* would give the right number. I only mention this as a possibility.

B-51. μαρτυρῶ (ὃν εἰσάγει ἐαυτῷ υἱόν) εἶναι τοῦτον κ. τ. λ. The words bracketed are not part of the oath, but a parenthetical explanation. The "his lawful son" is wrong. "I swear that this child (the child whom he is presenting as his son) is born in lawful wedlock." The oath may apply to the introduction of adopted children also: see *Isaios*, VII. 16: *ἔστι δ' αὐτοῖς νόμος ὁ αὐτός, ἐάν τέ τινα φύσει γεγονότα εἰσάγῃ τις ἐάν τε ποιητόν, ἐπιτιθέναι πίστιν κατὰ τῶν ἱερῶν ἢ μὴν ἐξ ἀστῆς εἰσάγειν καὶ γεγονότα ὀρθῶς*.

The weak point in Mr. Tarbell's comment is his explanation of *A*, line 30—the appeal to the Demotionidai. No one who reads through the document without prejudice, and in happy ignorance of the theories of German scholars, can possibly believe that the Demotionidai are identical with the *phrateres*—that the court of appeal is identical with the court from the decision of which appeal is made. Mr. Tarbell says (p. 152), "the years that have elapsed since he was on trial before disguise a little the inappropriateness of the word *ἐφίημι*;" but I am sure that, when I take the privilege, which I think he is wrong in conceding to other suitors, and appeal from himself to himself, he will reverse his decision.

This inscription, one other, and the texts of the orators, are the authorities on which we should base our view as to the constitution of the Attic phratries. In such matters we should begin by shutting our eyes to lexicographers, new and old, and be especially shy of hand-books.

A word, now, as to Mr. Tarbell's correct remark, that the laws of different phratries differed. At least three passages of *Isaios* confirm this: (1) III. 76, from which it appears that not all phratries enforced the enrolment of daughters (Mr. Tarbell's remark on p. 153 should be therefore corrected); (2) VII. 16 (already referred to), from which we may conclude that not all phratries required the legitimacy of adopted sons to be proved; (3) VIII. 18 (see Reiske's note). Not all phratries required *γαμηλίαν εισφέρειν* on the marriage of a member.

There is no difficulty in the parts of this document which relate to the *εἰσαγωγή* or *ἀνάκρισις*, which was contemporaneous, and indeed identical, with the sacrifice of the *κουρείον* (in *Isaios*, VI. 22, *ἀπηνέχθη τὸ κουρείον* is equivalent to "the child was rejected"). We learn, from B-13-21, that the *thiasoi*, from which the three witnesses at the *ἀνάκρισις* were drawn, were very small bodies: they must have comprised only the immediate relatives of the applicant. In the case of another phratry (*Isaios*, *ibid.*), it was in the power of the applicant's only son to prohibit the *εἰσαγωγή*. In the present case, if one son were the only other member of the applicant's *thiasos*, his opposition could be made ineffectual both at the *ἀνάκρισις* and at the *διαδικασία*.

It seems to me to be established by the texts from the orators quoted by Sauppe (*De Phratriis*, p. 8) that the *γεννήται* were a more extensive body than the *φράτερες*. The speaker in Demosthenes I.VII. 21 f., to prove that his father was an Athenian citizen, summons first his relations (*συγγενεῖς*), then his *φράτερες*, then his *γεννήται*, and then his *δημόται*. In the peroration of the same speech (67) we have the same order.¹ In *Isaios* VII. 16, the *φράτερες* and *γεννήται* are

¹ I doubt if the passage be right as it stands. The speaker is recapitulating the evidence; to make his recapitulation additionally effective he examines himself by the formula used in the *anakrisis* of the nine archons. Two slightly divergent versions of this formula have reached us (*POLLUX*, VIII. 85, and *Lex. Cantab.*, p. 670, both quoted in full by SAUPPE, *Ibid.*). It consisted of a series of questions, probably as follows: (1) Who was your father? (2) Were your ancestors on both sides, for three generations, Athenians? (3) What is your deme? (4) Have you altars of Zeus Herkeios and Apollo Patroos? etc. The speaker here asks himself and answers question (1); he then goes on, not to ask directly, but to answer implicitly, the other questions, with regard, however, not to himself but to his father, in order to adapt himself to the form in which the evidence was actually taken (see sections 20 f). *οἰκεῖοι τινες εἶναι μαρτυροῦσιν αὐτῷ*; (sc. ὅτι πολίτης ἦν). *πάνυ γε πρῶτον μὲν γε τέτταρες ἀνεψιοί, εἰτ' ἀνεψιαδοῦς, εἰθ' οἱ τὰς ἀνεψίας λαβόντες αὐτῷ*: so far he is answering question (2). *εἶναι* must, I think, be expunged, for it will be seen that, if it be retained, *ταύτης τινες οἰκεῖοι μαρτυροῦσιν* in the corresponding question relat-

mentioned as acting together, and having the same laws² and a *κοινὸν γραμματεῖον*. It would be difficult to tell from this passage alone if the *φράτερες* or the *γεννήται* were most extensive, did not Demosthenes enlighten us.³ If the *γεννήται* were a wider and less intimate association than the *φράτερες*, and if their laws were binding on the latter, it is not only natural, but necessary, to suppose that the *Δημοτιωνίδαι* here are *γεννήται*.

For the *διαδικασία*, of which *A* treats, the passage of Isaios (VII. 16) is so important that it must be quoted in full: ἔστι δ' αὐτοῖς νόμος ὁ αὐτός, ἕαν τε <τινα> φύσει γεγονότα εἰσάγῃ τις ἕαν τε ποιητόν, ἐπιτιθέναι πίστιν κατὰ τῶν ἱερῶν ἢ μὴν ἐξ ἀστῆς εἰσάγειν καὶ γεγονότα ὀρθῶς, καὶ τὸν ὑπάρχοντα φύσει καὶ τὸν ποιητόν· ποιήσαντος δὲ τοῦ εἰσαγόντος ταῦτα μὴδὲν ἥττον διαφρήφίξεσθαι καὶ τοὺς ἄλλους· κἂν δόξῃ, τότε εἰς τὸ κοινὸν γραμματεῖον ἐγγράφειν, πρότερον δὲ μὴ· τοι αὐτὰς ἀκριβείας ἔχει τὰ δίκαια τὰ παρ' αὐτοῖς. The first and in some cases the only step a father had to take in order to get his son admitted to a phratry was the *εἰσαγωγή*, accompanied by the sacrifice of the *κουρεῖον*. In the case of this phratry, the father had to swear that the son was born in lawful wedlock, and it is to be assumed that, if he swore this, he was allowed to offer the *κουρεῖον* and the *εἰσαγωγή* was accomplished. But, in order that it should be ratified by registration in the common books of the *γεννήται* and *φράτερες*, it was necessary that the votes of the members should be taken. We do not learn if the vote here was taken on the day of the *κουρεῶτις* (as ap. Demosth. XLIII. 14) or after any interval of time. This was regarded as a stringent law, and

ing to his mother (68) must be taken in the same sense, and then *φράτερες τῶν οἰκείων ταῦτα* (or *ταῦτά*?) *μεμαρτυρήκασιν* means *φράτερες τῶν οἰκείων μεμαρτυρήκασιν οἰκεῖοι εἶναι*, which is nonsense. It is evident that, in the concluding clause in 67, *εἰθ' οἱ δημόται*, κ. τ. λ., there is, if not actually an answer, at least an allusion to question (3). It follows, that the intervening words must contain an answer to question (4). The phrase *Ἀπόλλωνος πατρῶν καὶ Διὸς ἱρκείου γεννῆται* is, I think, an impossible one. The sense requires *εἴτα φράτερες <εἴτ'> Ἀπόλλωνος πατρῶν [κοινωνοῦντες] καὶ Διὸς ἱρκείου γεννῆται*? I think some such alteration is supported by the fact, that the order in which the two gods are usually mentioned is here inverted.

² This is quite evident from the passage. Anyone consulting it hastily might think that the conclusion was drawn from a mistaken interpretation of *νόμος ὁ αὐτός* (see Tarbell, p. 146 at the foot).

³ In this speech of Isaios (27), *γεννήτας* should be substituted for *συγγενεῖς*. The *συγγενεῖς* had no register. It is impossible that the terms should be here used synonymously.

evidently, in the case of some phratries, the father's word on oath, and a compliance with the necessary ceremonies, was all that was required; there was no *διαψήφισις*. The law of the Demotionidai was still more stringent. Not only had the father's oath at the *εἰσαγωγή* to be supported by three witnesses, but the *διαψήφισις* or, as it is here called, *διαδικασία* took place a year after the sacrifice of the *κουρείον*, so that the opposition had plenty of time to prepare their case. If we once recognize that the Demotionidai are *γεννῆται*, and not *φράτερες*, there is nothing unintelligible in A, though there are many points in regard to which we desire further information. The term *ὁ Δεκελείων οἶκος* certainly awaits illustration. It is in so far synonymous with the phratry that the priest of Zeus Phratrion, who is elsewhere spoken of as *ὁ ἱερεὺς* simply, is, in line 41, called *ἱερεὺς τοῦ Δεκελείων οἴκου*, to distinguish him, probably, not so much from the priest of the Demotionidai, who, if he existed, was not a priest of Zeus Phratrion, as from the priest or priests of other phratries which were comprised in the Demotionidai, and whose members took part in the voting on this occasion.⁴ A really difficult question is: Why is he alone, and not the phratriarch also, responsible for the fine? This is certainly significant and not fortuitous. An answer is demanded. I do not know if I am right in suggesting the following. The responsibility for the fine was a check on malpractices. The phratriarch is made responsible for the other fines because it was his duty to give the votes (*διδόναι τοὺς ψήφους*). In this case, it was not the phratriarch, but an officer of the Demotionidai, who put the question. No responsibility therefore attached to the phratriarch on this account. The priest is made responsible because he did influence the decision in so far as the appointment of the five *συνήγοροι*, no doubt, rested largely with him. The fact that the phratriarch is exempted shows that he had no voice in their appointment and that the *Δεκελείων οἶκος* was a religious not a civil body, representative of, or governing, this phratry.

The information which we derive from this inscription and the authorities I have mentioned is, that the *γεννῆται* were a body more widely removed from the individual, and more authoritative than the *φράτερες*, and therefore presumably having several *φρατρίαι* subject to them. There seems to me to be nothing in the texts, which have been quoted and requoted from the lexicographers, to disprove this.

⁴ Töppfer's statement contradicting this (*Attische Gen.*, p. 16 nt) is quite arbitrary, he does not give his reasons.

I do not wish here to undertake the difficult task of discussing these statements.⁵ I would only protest against Mr. Tarbell's identification of ὀργεῶνες and θιασῶται, which I think not justifiable, and against the apparently universal assumption, that in the passage of Philochoros, which he quotes (p. 148), the words τοὺς ὀργεῶνας κ. τ. λ. must be the object of the verb δέχεσθαι.

I have not been able to consult Szanto's article on this inscription. My only desire has been to point out that there has been too much theorizing in this matter and too little confession of ignorance, and that our only hope lies in adherence to the plain sense of inscribed texts.

W. R. PATON.

Aberdeen, Scotland.

P. S.—I have not attempted to discuss the question, whether all the φράτερες were, *ipso facto*, γεννήται. Those who take the view, that they were not, might thus explain the Δεκελείων οἶκος. The Demotionidai had several phratries subject to them: these phratries were localized in different demes or groups of demes: in each of these localities, the Demotionidai had a religious sub-centre which was called οἶκος. In this case, the priest of the Δεκελείων οἶκος is perhaps not the same as the priest of the phratry.

Schöll's essay, *Die Kleisthenische Phratrien* (*Sitzungsber. der Bayr. Ak.*, 1889, II) is very interesting. His explanation of the appeal is much the same as Mr. Tarbell's.

MR. TARBELL'S REPLY TO MR. PATON'S COMMENT.

The important point raised by Mr. Paton in the foregoing contribution concerns the relation of gens and phratry. That there was some sort of intimate connection between the two is abundantly evident. The question is, did the phratry include the gens, or was the phratry (or a part of it) included by the gens? Mr. Paton pronounces for the latter alternative. Apart from the inscription under discussion, the evidence for this view reduces itself, on examination, to the order in which the witnesses are called in Demosthenes LVII. The

⁵ No one should cite such authorities, without giving some account of their sources. American and English scholars shun *Quellen-Kritik* for a bad and a good reason. It introduces a new difficulty, it opens a new door for arbitrary conjecture.

force of this evidence appears to me to be weakened—I will not say destroyed—by two considerations. (1) The order of mention of the successive classes is not constant. In § 24 we have *συγγενῶν καὶ φρατέρων καὶ δημοτῶν καὶ γεννητῶν*, and *φράτερι συγγενέσι δημόταις γεννήταις*, both orders varying from the order of citation. (2) After the four classes enumerated, a fifth class are called to establish the same point (§ 28). These are those kinsmen who share with the speaker's family a common place of burial, and who are therefore his *γεννήται*, or rather, as I think, a section of them (*cf.* § 67). The order of citation is therefore not an order of steady progression from narrower to wider bodies.

Of positive evidence against Mr. Paton's view I must own that I do not think there is much. But the fact that the names of phratries, so far as known, are gentile in form is not so easily reconcilable with the theory which divides a gens between several phratries as it is with the contrary theory.

I therefore "confess ignorance" on this subject. But I must protest, again, that Isaïos VII. 16 does not prove that *φράτερες* and *γεννήται* had the same laws. They had *one* law in common, requiring legitimacy of birth as a condition of membership. More than that cannot be inferred from the passage. Least of all can it be inferred that the gens had any authority over the phratry.

The following points are taken up in Mr. Paton's order. I touch only on such as affect my previous paper.

B-51. Nothing whatever is gained by treating the words *ὃν εἰσάγει ἑαυτῷ υἱόν* as parenthetical. The wording of the oath remains as ungrammatical as before. But Mr. Paton is quite right in correcting "his lawful son."

Mr. Paton's inference from Isaïos III. 76 appears to me unwarrantable. The speaker is arguing that the father of a certain girl, by failing to present her for admission to his phratry, confessed her illegitimacy. This is treated in § 75 as a matter of course, and the implication, so far, is that the registration of daughters was the universal rule. In the next section he adds, *καὶ ταῦτα νόμον ὄντος αὐτοῖς (i. e., τοῖς φράτερι τοῖς ἐκείνου)*. I take this to be a somewhat superfluous insistence upon a well-known obligation, rather than an implication that the statutes of other phratries differed. This view receives confirmation from the language of Isaïos III. 16, from which Mr. Paton infers that "not all phratries required the legitimacy of adopted sons to be

proved." But, as I pointed out in my article, the conditions of membership in a phratry were identical with the conditions of Athenian citizenship, and these were fixed by general Athenian law. Nothing is more likely than that different phratries differed in the strictness with which they administered the law, but that any phratry confessedly admitted illegitimate children, when adopted, is out of the question. In my view, the language of Isaïos VIII. 18 (τοῖς φράτερσι γαμηλίαν εἰσήνεγκε κατὰ τοὺς ἐκείνων νόμους) should be disposed of in the same way. Reiske, whom Mr. Paton ought not to have appealed to, explains the passage differently. His note is: *unde colligitur, non omnibus phratriis eosdem ritus fuisse nuptiarum celebrandarum, sed cuique suos proprios.*

Finally, we have no evidence that the *thiasoi* "comprised only the immediate relatives of the applicant." And, in the case recorded in Isaïos VI. 22, it was not "in the power of the applicant's only son to prohibit the *εἰσαγωγή*." The son protested and the phratry sustained his protest: οὐθ' ὁ υἱὸς αὐτῷ Φιλοκτήμων συνεχώρει οὐθ' οἱ φράτερες εἰσεδέξαντο, ἀλλ' ἀπηνέχθη τὸ κούρειον.

F. B. TARBELL.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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GENERAL SUMMARY.

From **EGYPT**, owing to the decision of the Egypt Exploration Fund not to excavate during the past season, and to the transference of Mr. Petrie's activity to Palestine, there is nothing to report; but an interesting question is opened up in connection with some reliefs, now in the Louvre and British Museum, which were found at Abydos. M. Heuzey believes them to reveal the existence of an early Mesopotamian or Syrian school of sculpture dependent on Babylonian art, while Professor Sayce, and perhaps also M. Maspero, is of the opinion that they are examples of an Ethiopic school almost wholly independent of Egypt. In **PERSIA**, M. de Morgan is continuing his important excavations in early cemeteries, and the *Académie des Inscriptions* carries forward its good work by sending out M. Guiffrey, to study the early Christian monuments of the **ORIENT**, M. Bénédite, for inscriptions in the **SINAITIC PENINSULA**, and M. Dutreuil du Rhin, to explore in **CENTRAL ASIA**. *The Christian monuments of the ORIENT* are beginning to excite a little of the attention they deserve. MM. Ramsay and Bent have studied a number in Asia Minor: we have referred to M. Guiffrey's mission, and are pleased to add that a history of the ancient churches of the East, especially of Syria, Persia, and India, is being written by Rev. J. J. Nouri. There is a revived interest in the Holy Land. Both the German and the English societies for the exploration of **PALESTINE** are issuing maps that are far superior to anything yet published. Mr. Petrie's few weeks of excavation on the site of the ancient *Lachish* inaugurate a new era in our acquaintance with the arts and manufactures, the history, commerce and

cult of the early tribes of the land both before and during Hebrew dominion. Henceforth a criterion is established by which to date the remains of the ancient towns of Palestine.

The summer's harvest from **ASIA MINOR** is rich and varied. Mr. Bent's minute examination of the small tract of Kilikia Tracheiotis proved in its way as fruitful in discoveries—especially that of Olba—as Professor Ramsay's extended trip through Pisidia, Isauria and Kappadokia. The examination of the ruins of the Pisidian hill-fortress of *Adada* appears to have been, up to the present, Mr. Ramsay's most interesting single piece of investigation. MM. Schliemann and Dörpfeld have a most interesting report to make of their excavations at *Ilion = Troy*, the main object of which was to complete the plan of the city of the second or Homeric period. There is no doubt that their campaign has cleared up many doubtful points in the chronology of Troy and given a firmer basis for believing that the city lay at Hissarlik. The ramp leading up to the citadel, part of the Homeric royal palace, and some interesting early pottery, are the more prominent of the single discoveries. Austria shows her intention of continuing, under Prince Liechtenstein's patronage, the researches so auspiciously begun a few years ago.

From **KYROS**, we learn of the successful termination of the excavations at *Salamis*. In **GREECE**, aside from the discovery of part of the royal palace in the acropolis of Mykenai, the main interest is centred in the sepulchral tumuli of *Attika*. Following up the phenomenal success at Vaphio, the Government continued excavations in the prehistoric tumulus at Bourba; in that of Belanideza, which contains tombs of the prehistoric, the archaic-Hellenic, and the Roman periods; and the Hellenic tumulus of Petreza. Tombs of the prehistoric period were found not far from Sparta, at Slavochori, near Argos, and at other places. All these discoveries are valuable for early-Greek civilization, but perhaps the most exciting of all is the discovery, in the mound called *Soros*, of the graves of the 192 Athenians, who fell at *Marathon*. The British School has closed its very successful season's excavations at *Megalopolis*, after having excavated the principal part of a pure Greek theatre of great size which settles the recent controversy in favor of those who held that the Greek actors were placed upon a stage raised above the chorus in the orchestra.

The study of the prehistoric antiquities of Italy has been of late stimulated by the contributions of Signor Orsi, who did excellent service in the archæology of Northern Italy before he was transferred to **SICILY**. His latest contributions draw attention to two points: (1) a possible identity of date in the Italian civilization of the *terremare* and the Greek civilization of Mykenai; (2) the intimate relations between the early archæology of Sicily and that of the Mykenaiian culture, proving the influence of the East on the West at that early period of the Pelasgic civilization.

In view of the great interest of the unique prehistoric monuments of Sicily, which Signor Orsi for the first time describes, it may be said that Sicily will take rank among the most important archæological fields. In ITALY, prehistoric investigations have been carried on at *Brembate Sotto* and *Fontanella*, as well as in *Sardinia* where several tombs and caves of the "giants" have been found. From *Arezzo* comes the news of the discovery of a potter's establishment conducted on the coöperative system by Greek artisans from Southern Italy. Some remarkable frescoes have come to light at *Pompeii*, and at *Rome* the arrangement of the banks of the Tiber at the time of Augustus has been partially ascertained by finding *in situ* a number of terminal posts (*cippi*). The only important piece of sculpture discovered appears to be a fine archaic metope of one of the temples of *Selinous*. Finally, an inscription found at *Florence*, furnishes the first epigraphic evidence that *Florentia* was a Roman colony.

SPAIN, thanks to M. Heuzey, appears as the centre of a school of archaic sculpture in which early Greek art has reacted upon the Phœnicians, in one of whose Spanish colonies these interesting works may have been produced.

ORIENT.

EXPLORATION OF CHRISTIAN ANTIQUITIES.—M. JULES GUIFFREY, Archivist of the National Archives, is charged with a mission in the East (Turkey, Greece, Syria, and Egypt) with the object of studying the earliest monuments of Christian civilization.—*Chron. des Arts*, 1890, No. 24.

A comprehensive history of the ancient Christian churches still existing in Syria, Persia, and India has at length been undertaken by a dignitary of that Romanized branch of the Nestorian Church known as the Chaldean Church. The author, the Rev. J. J. Nouri, who is Archdeacon of Babylon, has been spending some weeks in Southern India, visiting the centres of both the Uniat and the Jacobite Syrian churches in Travancore, Bangalore, etc., and making copious extracts from records in those seats of early Indian Christianity, some of which are said to date back to the fifth century. One portion of the Archdeacon's work is to comprise a complete series of annals of the Chaldean race from the most ancient to the most modern times.—*Athenæum*, July 12.

ORIENTAL CERAMICS.—Mr. HENRY WALLIS, R.W.S., is still busily engaged in contributing to our knowledge of early Eastern and Moslem Pottery. Having exhausted, in his *Early Persian Ceramic Art*, nearly if not all the known specimens of Persian pottery which may fairly be attributed to dates anterior to the thirteenth century, he is now engaged upon a larger work, illustrated like its forerunners with careful drawings by himself. This will deal with a notable collection hitherto unknown, and with the history of Persian lustreware. Pending the arrangements neces-

sary to complete this work for publication, he is preparing a monograph upon Persian art since the Sassanian period. This will be mainly devoted to that almost-unknown class of pottery more or less influenced by Byzantine motives, of which he has been fortunate enough to secure some examples from the East. Specimens of contemporary pottery from Egypt and Asia Minor, some found by himself, others from the British Museum and the excavations of Count d'Hulst at Cairo last winter, will also be illustrated and commented upon.—*Academy*, Aug. 9.

EGYPT.

ETHIOPIO OR ASIATIC RELIEFS IN THE LOUVRE AND THE BRITISH MUSEUM.—

Two articles by M. HEUZEY in the *Revue archéologique* have called attention to some very remarkable reliefs, of which one is in the Louvre, another at least in private hands, and three are in the British Museum.

In the *Rev. arch.*, 1890, I, pp. 145-52, M. Heuzey describes the relief in the Louvre. It must have formed part of an oblong platter of hard schist, of dark green color; in the centre of which was left a large circular rim with raised edges. There remains over a third part, on which is a series of figures in very low relief representing a band of warriors marching, and, in the field, several animals. In the figures, the Asiatic character of the types is very striking: the only garment is a short skirt in vertical folds held by a heavy plated belt from which hangs a jackal-skin and tail, an emblem of honor. The arms are especially curious and varied. Some warriors brandish in their right hand a mace terminating in a spherical mass probably of stone, similar to the national arm of Babylonia and Assyria. Others raise such weapons as harpoons, boomerangs, and perhaps an axe with curved handle and triangular edge. In their left they hold a lance or, more generally, a bow. One holds in his right a bundle of cutting-arrows, which ended not in a point but in a blade of stone-agate or silex. The subject seems to be a hunting-scene, for a hare and two gazelles are seen, given in the vigorous style of Chaldeo-Assyrian art. There are striking analogies to the paintings of the XII dynasty at Beni-Hassan, and this leads M. Heuzey to select quite an early date for this relief: "The warriors are not properly Chaldeans or Assyrians; but the work and style point to a group of populations placed quite early under the influence of Chaldean culture, like those that established themselves between the Euphrates, the coast of Syria, and the Red Sea."

A letter by M. MASPERO on this relief is published in the *Rev. arch.*, 1890, I, pp. 334-7, accompanied by M. HEUZEY's further comments. M. Maspero says, that he saw, in Egypt, this relief as well as another of the same style and material, now in a private collection. It was said to come from Saqqarah or Abydos, and was offered to him in company with several

small objects found in the Aramaic and Persian necropolis of Saqqarah, among which were a cylinder of Egyptian style with a cuneiform inscription, and a checker in artificial *lapis-lazuli* bearing four Aramaic letters. The relief belongs apparently to a table for offerings and, in M. Maspero's opinion, had two rims and consequently two concentric bands of reliefs forming one procession. In the technique of the hair, in the skirt, in the animal-skin, and in the arms, M. Maspero discovers a purely Egyptian character. The two standards are Egyptian, one the flag of the West, the other of the East; so also are the animals. In the opinion of M. the style of workmanship is also Egyptian, of the ruder type, by an unskilled artist. However, in his opinion, it may be a Libyan or possibly Asiatic work, but in any case under direct Egyptian influence. At all events, the tribe represented on the relief, whether it be Libyan or Asiatic, is marching under Egyptian standards, and is therefore an ally not an enemy. M. Heuzey, notwithstanding M. Maspero's remarks, keeps to his theory, that the warriors are Syrians.

Three other reliefs belonging to the same class have found their way to the British Museum. They are not published, as that of the Louvre has been—in a good heliotype—but are merely described, as follows, by E. A. W. BUDGE, in the *Classical Review* (July, 1890, pp. 322–3): “Some years ago the Trustees of the British Museum acquired three pieces of green schist with sculptures of a similar nature, and among them is the large fragment of which that described by M. Heuzey forms a completing portion.

“No. 20791. Rectangular fragment $11 \times 7\frac{1}{2}$ ins., on which is represented in relief a scene after a battle. A number of woolly-headed, bearded, circumcized men are lying dead or dying on the ground; one of these has his arms tied together above the elbows. In the upper part of the scene is a lion, one of whose paws is firmly planted on the leg and another on the arm of one of these prostrate figures. In the lower part of the scene a number of vultures and carrion-crows are picking out the eyes of the dead (who are naked) and devouring their flesh. Above, to the right, are two figures, the heads and shoulders of which are wanting; one is an officer or overseer, and the other a captive with arms tied together behind him, and a heavy weight suspended from his neck. On the back of this fragment is part of a scene in which two giraffes are cropping the leaves of a palm-tree.

“No. 20790. Fragment of irregular shape, 12×6 ins., which joins that published by M. Heuzey. On it are represented in relief (1) a house with a domed roof and two towers, on the left hand is the door; a bull with two heads, one of which faces to the right, the other to the left: (2) a lion followed by a lioness, rushing on to seize a hunter who is armed with a bow and another weapon; head of the lion is transfixd with two arrows, as appears

from the Louvre fragment: (3) behind the lions are two hunters, both wearing feathers on their heads. The first carries a double-bladed axe in the right hand and, in the left, a sceptre on the top of which is a bird (eagle?); over his shoulder hangs a bag. Each man wears a short tunic, with folds, fastened around his waist, from which hangs a tail. The second hunter draws toward him a gazelle which he has caught with a lasso. Close by runs a dog or jackal.

"No. 20792. Fragment of irregular shape; its greatest measurements being $14 \times 8\frac{1}{2}$ ins. It appears to join the Louvre fragment, and, together with the British-Museum fragment No. 20790, to have formed part of the libation(?) slab of which very little is now missing. This fragment proves beyond all doubt that a hunting-scene is represented. The first hunter holds part of the rope which has been used to lasso the gazelle; the second is armed with a spear and a boomerang; the third with a bow and a double-bladed hatchet; and the fourth with two spears and a boomerang. Each man wears feathers, a tunic, and a tail. Beneath this row of figures are an oryx, an ostrich, an oryx, a stag (?) with branching antlers, and an animal like a jackal, the tail of which is very much like that hanging from the waist behind each man. At the tapering end of this fragment is a lion, the head of which is transfixd with five arrows; an arrow shot well into one of his thighs makes him lash his tail. The three hunters on the other side of the animals are armed and dressed like their companions; each, however, carries a bag (?) apparently slung over his shoulder.

"These fragments though found in Egypt are not of Egyptian workmanship, and were brought thither from some foreign Eastern land either as gifts or articles of tribute. The lions are like those on the Assyrian sculptures; the birds are identical with those found on the Babylonian landmarks, and the features of the men are Shemitic. They were most probably made by Mesopotamian sculptors about 1550 B. C., and sent by his Mesopotamian allies to Amenophis III, to whom, on account of the lion-hunting expeditions sculptured on them, they would be an acceptable gift."

A. H. SAYCE writes to the *Academy* (of Aug. 9): "Since I wrote on this subject in the *Academy* of July 26, I have read Mr. Budge's article in the *Classical Review*, and see that it contains evidence against his conjecture that the slabs which he describes came from Mesopotamia. One of them, he states, has upon it the representation of two giraffes browsing on a palm-tree. Now the giraffè has been confined to the Ethiopian region of the world during the historical period, and was consequently unknown to the inhabitants of Asia. The stones, therefore, on which it is depicted could not have come from Mesopotamia, but must have been brought from the districts of the Soudan south of Egypt. The dress of the huntsmen represented on the slabs bears out this conclusion. It is the same as that of

the people of Kesh or Kush whose portraits are met with on the Egyptian monuments. The feathered head-dress worn by Asiatics like the Zakkur or Merodach-nadin-akhi of Babylonia is quite different, consisting of a fringe of feathers which runs round the top of a square cap. On the other hand, the one or two tall feathers stuck in the hair of the huntsmen on the slabs exactly resemble the mode in which, according to the Egyptian artists, certain Kushites and Libyans decorated their heads. We must, accordingly, see in the slabs an example of early Kushite or Ethiopian art. The sculptors probably belonged to the same race as the prehistoric people who have covered the sandstone rocks of Upper Egypt with their rude designs. Here, too, we have figures of huntsmen armed with bows and arrows, of giraffes, ostriches, and other animals, in the same style of art as that of the slabs. Both Mr. Petrie and myself have pointed out the evidence there is for the great antiquity of these drawings, which imply that, at the time they were made, the district south of Silsilis was a well-wooded and, therefore, well-watered land, where herds of giraffes browsed on the foliage of the shrubs—a physical condition of the country very unlike that which has prevailed there in historical times. Similar prehistoric drawings on the rocks have been found in various parts of northern Africa, in southern Morocco by Lenz (*Timbuktu*, II, pp. 10, 367), in the district between Tripoli and Ghadames by Rohlfis (*Quer durch Afrika*, I, p. 52), in the country of the Tibbu by Nachtigal (*Sahara und Sudan*, I, p. 307) and in Kordofan by Lejean (Hartmann, *Nigritier*, I, p. 41). Dr. Bonnet has recently discovered them in southern Oran, along with the stone implements by means of which they were engraved (*Revue d'Ethnographie*, VIII). As I have before remarked in the *Academy* (March 15, 1890), they remind us of the Bushman paintings on the rocks of southern Africa. I may add that the museum of Constantinople contains some curious sculptured stones from Darfur which in many points present a strong resemblance to those which are the subject of this letter."

THE BENI-HASSAN CARTOUCHES.—Mr. C. Murch writes from Ramleh (Egypt) under date of July 29: "Soon after the mutilation of the celebrated Khnum Hotep tomb at Beni-Hassan became known, it was suggested that, if the cartouches could be found, it would be worth while to replace them in their former positions in the tomb. On January 24, I learned that two cartouches I had purchased from a native dealer belonged to those that had been stolen from the Beni-Hassan tomb; and I hastened, on the same day, to acquaint the Egyptian government with the fact, at the same time accompanying my statement by the following words: 'I am ready to tell you at any time the facts as to where I got the pieces. I feel satisfied that with this information you will be able to work back to the guilty parties.' I supposed that the authorities would hasten to ask me

where and from whom I purchased the pieces. In this I was mistaken. Some days later I had an opportunity of seeing the dealer from whom I made the purchase, and I succeeded in getting a third cartouche. On February 25, I informed the Egyptian government of this third cartouche; but to this day the authorities have never asked me anything about where I got either the first two or the third of the cartouches.

"The Egyptian government will never be able to offer a reasonable excuse for having permitted conditions to exist which admitted of the possibility of such wholesale destruction of tombs as was carried on during the summer and fall of 1889 within a radius of fifteen miles, including Beni-Hassan. I saw myself scarcely less than one hundred of these pieces.

"The man from whom I purchased the cartouches has told me, repeatedly, that he sold to the Bulâq Museum thirty-eight or thirty-nine pieces, every one of which came from the neighborhood of either Beni-Hassan or Tel-el-Amarna.

"Some time ago the Egyptian authorities, through the American Consul-General, requested me to return the cartouches I had purchased, as they had been stolen from the tomb. I proposed to return the cartouches on the condition that the government should make a vigorous effort to recover the remaining cartouches; that they should agree to restore the cartouches to their places in the tomb; and that the tomb should be thoroughly secured against further depredations by a strong iron door. In reply to a further unconditional offer, I am told that the Archæological Department will be very glad to get them, and that it may be possible to replace them in their former position; but no positive agreement to do so is made, nor is any intimation given that any effort will ever be undertaken to secure the remaining cartouches or discover the perpetrators of the deed."

"JOSEPH IN EGYPT."—Under this title, Dr. H. BRUGSCH contributes an article to the *Deutsche Rundschau* for May. At its close, Dr. Brugsch announces the discovery of an inscribed stone found last winter by an American, Mr. Charles E. Wilbour. The tablet contains 32 lines, more or less defaced. At its head is the name and title of a hitherto unknown king, *Chit-het*, who, in the fourteenth year of his reign, speaks of "the very great misfortune of having no overflow of the Nile for seven years." Certain peculiarities in the style of writing and in the grouping of hieroglyphs assign this stone to the fourth century B. C. Evidently somebody had taken an old story of a seven-years' famine, and clothed it in modern dress for the purpose of exciting respect for some fourth-century divinity. In the reign of this ancient king, the seven years of famine had closed with the fourteenth year of his reign. The seven "fat years" had preceded them. The throne-name of this king, different from his family name, has

been found once on an inscription over a door in the great pyramid of Saqqarah, from which it appears that the king belonged to the first Egyptian dynasty, at least 1500 years before the time of Joseph. This old story, with the name of the old king, was again circulated in the XXII dynasty. Dr. Brugsch believes in the real historic character of this newly-found stone, and calls Chit-het "the longest forgotten king of any epoch;" and he says that the stone will be prized through all time as an important piece of evidence for the actual occurrence of a seven-years' famine in the time of Joseph.—L. DICKERMANN, in *Zion's Herald*.

CAIRO.—FRENCH SCHOOL.—The work of the French School of Archæology at Cairo progresses apace. It is the self-imposed law of this studious and learned body, that each member of the school shall annually make a full and complete copy of some one monument of ancient Egypt, small or large, temple or tomb. In certain cases, where the task is too great for the limit of time, two or more years may be devoted to it. The school proposes this year to attack the multitudinous texts of the Great Temple of Edfû—a gigantic undertaking, and one which will surely give employment to more than one student for at least some years. In the meanwhile, M. Bénédite has transcribed all the texts and copied all the bas-reliefs at Philæ, and it is hoped that his *Mémoire* may be ready for publication in 1892. M. Bouriant is progressing fast with Médinet Habû, where he has been at work for the last two years. The forthcoming numbers of the *Mémoires* of the school will contain, *inter alia*, the end of M. Ravaisse's monograph on the old palace of the Fatimite Kaliphs at Cairo, some important Coptic texts, and transcripts of several historic tombs at Thebes, including that of Queen Titi, with illustrations in chromolithography.

MENDES.—DISCOVERY OF A PTOLEMAIC LIBRARY OF PAPYRI.—A discovery has been made on the site of the ancient Mendes which may be of more than mere Egyptologic importance. A building has been partly unearthed, consisting of some fourteen rooms containing what was apparently a library of the Ptolemaic period. More than five hundred rolls of papyrus have been found in a carbonized condition, the building having evidently been burned. These papyri are written in Greek, and, so far as can be seen, are of the Ptolemaic or Roman age, and not Byzantine. There is a chance, therefore, of finding some works of value. But it will be necessary to spend several hundred pounds in excavation, and the Museum is just now without funds. Then comes the slow work of unrolling and deciphering, for which it will be necessary to employ one of the experts at Naples.—N. Y. *E. Post*, July 7; *Cour. de l'Art*, 1890, No. 27.

THEBES.—From Thebes there comes intelligence of the discovery, this spring, of a headless statue of Seti II of heroic size and archaic style. It was found at a depth of two feet below the surface level of the mud

deposit which covers the floor of the great Hypostyle Hall. Greeks and Europeans, meanwhile, are carrying on an extensive system of plunder at Ekhnim and other places.—AMELIA B. EDWARDS, in *Academy*, July 26.

ALGERIA.

CHERCHELL.—A CHRISTIAN SARCOPHAGUS-RELIEF.—To the west of Chercell, opposite the present cemetery, two Roman wells and two sepulchral chambers were found last year, containing a large number of stone sarcophagi. Among other contents that escaped destruction was the front of the cover of a Christian sarcophagus of the fourth or fifth century. It is covered with figures in relief. In the centre is an unfinished circular medallion supported by two genii. On the left is the Adoration of the Magi accompanied by their camels, while Joseph rests on the back of the Virgin's chair. On the right are the three children in the fiery furnace.—*Revue arch.*, 1890, I, pp. 214-16.

ASIA.

HINDUSTAN.

INDO-SASSANIAN COINS.—Recent numbers of the *Proceedings* of the Asiatic Society of Bengal contain reports on old coins, acquired by the government as treasure-trove, by Dr. Hoernle, the philological secretary. The most important find here recorded is that of 175 silver pieces of the class called Indo-Sassanian, which were discovered in Marwara. According to Dr. Hoernle, they resemble the genuine Sassanian type more closely than any hitherto known. They belong to two series: one imitating the coins of the Sassanian king Firuz (459-86 A. D.) in minute details, though of rude execution; the other substituting a barbaric head for that of Firuz. On none is there any legend. It is known from history that about 470 A. D. the White Huns, under their leader Toramana, annexed the eastern provinces of the Sassanian kingdom, and passed on to the invasion of India. It is further known that Toramana imitated the contemporary Gupta coinage, as well as that of Kashmir, putting his name on them. Dr. Hoernle, therefore, argues that these Indo-Sassanian coins also belong to Toramana, at an earlier period of his conquests. In this connection it is interesting to note that the barbaric head with its thick lips and large nose is not unlike that on the gold coins of the Indo-Scythian king Kadphises.—*Academy*, June 14.

INDIAN PHILOLOGY.—*Part IV* of *Epigraphia Indica*—the official record of the inscriptions collected in the course of the Archæological Survey of India—consists, like former parts, of texts and translations which have

been prepared by German scholars from the impressions made by Dr. James Burgess and his assistants. Perhaps the most important paper is that by Prof. Kielhorn, of Göttingen, upon the Siyadoni inscription, which has enabled him to reconstruct the order of four kings of Kanauj in the ninth and tenth centuries. This inscription records the gifts of traders to Vishnu; and many of the gifts are valued in terms of *drammas*, which is evidently a coin or monetary denomination of some sort. Another inscription, from Peheva in the Karnal district of the Punjab—edited by Prof. Bühler, of Vienna—similarly records the voluntary taxation for religious purposes imposed upon themselves by certain horse-dealers.—*Academy*, June 21.

AFGHANISTAN.

GRÆCO-INDIAN STATUES.—M. Sénart has published, in the *Journal Asiatique* (1890, Feb.-March), a paper in which he describes very fully the remarkable sculptures found at Sikri and already referred to on p. 179 of this volume. His paper is accompanied by good plates. A full summary of it will be found in our summary of the *Journal Asiatique*.

PERSIA.

EXCAVATIONS BY M. DE MORGAN.—The excavations undertaken by M. de Morgan at the request of the Ministry of Public Instruction in Linkoran (Northern Persia, on the banks of the Caspian) have been eminently successful. His encampment has been at an elevation of 1745 met. at Aspa Hiz, six kilom. from the frontier. He has found a large number of dolmens, which, instead of containing, like those of Scandinavian lands, sepulchral furniture of polished stone, belong, on the contrary, to the bronze or the iron age. The country appears to have been unoccupied when these dolmen-builders (which he believes to have been Aryans) established themselves in it: the stone age is unknown in the province of Linkoran. M. de Morgan has collected more than 1300 objects from about 200 tombs. The collection is on its way to Paris.—*Cour. de l'Art*, 1890, Nos. 27, 30.

CENTRAL ASIA.

The *Académie des Inscriptions* has allotted 15,000 frs., from the Garnier Fund, to M. Dutreuil du Rhin, who is charged with a mission of exploration in Central Asia.

BABYLONIA.

A COLLECTION OF BABYLONIAN TABLETS.—A very interesting collection of clay-tablets found in the ruins of Sippara was sold by Messrs. Sotheby and Co. on July 4. The catalogue contains about two hundred and fifty lots, the majority dating from the early period of the First Babylonian Empire. These are generally contracts for the sale of lands, fields, houses,

grain, slaves, etc., and attest the great commercial activity of the metropolis of the rising empire. A marriage contract of the time of Khammurabi (No. 217) claims special attention, as it is unique among the documents of this epoch. The remainder of the collection consists of tablets of the Second Babylonian Empire, and of the Persian, Greek, and Parthian periods. Two are especially interesting from the social point of view. One is the summing up and judgment in a lawsuit of the thirteenth year of Nabonidos. A farmer named Iddin-Marduk had sent by boat to Babylon 480 measures of fruit. Kurgal-natan, who had undertaken the transport, lost part of his cargo on the way, and, having admitted that there had been neglect on his part, agreed to make restitution. When Iddin-Marduk came to claim the amount, Kurgal-natan avoided him, so that the former was compelled to bring the case before the court. The boat-owner, when summoned, acknowledged the charge, and was condemned to pay the value of the lost fruit. The decision is attested by the seals of five judges. This curious case shows that, in Babylonia, carriage practically included insurance. There are a great many contracts of sales and loans. An interesting one (No. 205) shows that slaves as well as lands, houses, and personal property were mortgaged. It also comprises lists of various kinds of tithes due to the temple of Esagil, of animals brought to Babylon for sale, and of other personal property. No doubt it was an inventory made before a mortgage, or a bill of sale.

The tablets of the Greek and Parthian periods are, as usual, mostly astronomical. The latest is of 91 B. C. The collection also includes a few Akkadian texts. The most important (No. 215) consists of 216 lines, and appears to be agricultural.—*Academy*, June 21.

TABLETS FROM NIFFER.—Professor Robert Harper of Yale College brought back from the University of Pennsylvania's expedition to Babylonia three tablets. They belong to the so-called class of loan-tablets, and were unearthed at Niffer. They are dated in the years two and four of Ashur-itilli-ilani, King of Assyria. The dates are of chronological value. They show that the Babylonian empire existed, if only in name, for four years after the death of Assurbanipal.—*Biblia*, Sept., 1890.

ARABIA.

MISSION TO MT. SINAI.—Marquis de Vogüé communicated to the *Académie des Inscriptions* a letter from M. Bénédite, whose epigraphic researches in the Sinaitic peninsula have already been partially reported (vol. v, pp. 88, 486). It is dated from the wady Feiran, May 17, 1890. M. Bénédite has copied more than a thousand inscriptions between the wady Nasb, the region of Magharat, the Mogatteb and the Feiran wadys. The

explorer believes that the region which he is now about to explore will not prove as fruitful.—*Paris Temps*, June 14.

PALESTINE.

NEW MAPS OF PALESTINE.—Dr. HANS FISCHER of Leipzig assisted by Prof. H. GUTHE has executed a fine new map of Palestine which is published, accompanied by an explanatory article of Dr. Fischer, in the *Zeitschrift d. deut. Palästina-Vereins*, XIII (1890), 1. Dr. Fischer remarks: "The geographic and especially the topographic exploration of Palestine has made extraordinary progress during the last decades. But this has not been made use of chartographically in the way required by the present condition of geography. The above new map of Palestina, on a scale of 1:700000 (pl. 2) is planned to meet this want, and we have considered our main problem to be, to give a clear and correct statement of the orohydrographic relations of this region. The nomenclature and especially the historical names are due to Professor H. Guthe." The most important source for this map was the great map published in 1880 by the English Palestine Exploration Fund, on the scale of 1:63360, in 26 sheets. Help has also been derived from Captain Conder's survey of a portion of Eastern Palestine in 1881; from Mr. Schumacher's survey of Dscholan, West Hauran, Ad-schlun, etc.; from Lieut. Mantell's maps of the coast of Syria; and from the maps of the French Expedition of 1860-1. A further list of sources is given by Dr. Fischer, involving an historic account of the successive investigations in the various provinces included in this map.

The Palestine Exploration Fund has now ready for issue the new map of Palestine, upon which Mr. GEORGE ARMSTRONG, the assistant secretary, has long been engaged. It is on the scale of three-eighths of an inch to the mile; and it takes in both sides of the Jordan, extending to Baalbek and Damascus in the north, and to Kadesh Barnea in the south. All modern names are in black; over these are printed Old-Testament and Apocrypha names in red, and New-Testament, Josephus, and Talmudic names in blue, thus showing at a glance all the identifications of sites that have been ascertained. A companion map, showing the elevations by raised contour-lines, is also approaching completion.—*Academy*, Aug. 2.

AN EARLY HEBREW INSCRIPTION.—Prof. SAYCE has communicated to me the following inscription on a small weight found on the site of Samaria, and purchased by Dr. Chaplin last spring: face 1, רבע של; face 2, רבענננ; which seems to read רבע של רבענננ, "a quarter of a quarter of a רבענננ." Mr. Flinders Petrie, to whom Prof. Sayce communicated this interpretation, writes that he has discovered, from other sources, that the standard weight of Northern Syria amounted to 640 grains, of which the quarter of a quarter would be 40 grains, that is, exactly the value of the

Samaritan weight in the possession of Dr. Chaplin. Whether **נצנ** is derived from the root **נצנ** cannot be decided yet, but the use of **של** is important at the probable date of the eighth century B. C., which the forms of the characters indicate, and in the northern kingdom. **של**, which is a contraction of **ל ש = אשר**, is found in *Canticles*, which is considered a production of the Samaritan kingdom, in *Jonah*, and in *Ecclesiastes*. The early use of **של** might perhaps help to bridge over the gulf which Prof. Margoliouth has found between classical Hebrew and that of Sirach. —A. NEUBAUER, in *Athenæum*, Aug. 2.

HEBREW INSCRIPTIONS OF THE PRE-EXILIO EPOCH.—A fixed starting-point in date can at last be assigned to the few pre-exilic Hebrew inscriptions which are at present known to us. Mr. Clark, of Jerusalem, possesses a seal which bears upon it the following inscription: **לְאִישָׁמַעבִּי הַמֶּלֶךְ**; "Belonging to Elishama' the son of the king." Now this Elishama' is evidently the Jewish prince who is mentioned, in *Jer.* xli. 1, as of "the seed royal" and grandfather of Ishmael, the contemporary of Zedekiah. He would, therefore, have flourished about 650 B. C., and the forms of the characters used in his inscription become a subject of epigraphic interest. Three of them are specially distinctive—*Aleph*, *Mêm*, and *Kaph*. Of these, *Aleph* and *Mêm* have precisely the same forms as in the Siloam inscription. On the other hand, the *Kaph* is less archaic than in the Siloam text. The latter must consequently be somewhat older than the seal of Elishama'; and the general opinion is thus justified which refers the tunnel and inscription of Siloam to the reign of either Ahaz or Hezekiah. —A. H. SAYCE, in *Academy*, Aug. 2.

CAESAREA (near).—**VESPASIAN'S COLONY OF CAESAREA.**—A letter from Dr. SCHUMACHER dated from Haifa to Professor Guthe gives information of the discovery, six kilom. N. W. of Caesarea, of ruins of buildings, and of a granite column with an inscription reading: **M(arcum) FL(avium) AGRIP-PAM PONTIF(icem) | II VIRAL(em) | COL(oniae) I (primae) FL(aviae) AUG(ustae) CAESAREAE ORA(TO)REM EX DEC(urionum) DEC(reto) PEC(unia) PUBL(ica)**. The letters are in the form that would be given by the reed or brush as used in judicial acts. It is important as the first inscription found on this site, and certainly the first in which the full name of this colony of Vespasian is given, which was, as Tacitus says, *Caesarea Judaeae caput*, the capital city both for native kings and Roman governors. Many coins, from Domitian down, bear the name of the city. The Roman colony was placed here very shortly after the end of the Jewish war. Its title of first colony, *colonia prima*, shows it to have been the first colony in the Roman Empire founded by Vespasian. The site where the inscription was found is interesting as showing that the territory of the colony extended as far as this point. The Agrippa mentioned in the inscription is conjectured to be the

son of Josephus, and the date to be before 100 A. D.—Prof. ZANGEMEISTER, in the *Zeitschrift d. deut. Palästina-Vereins*, XIII (1890), 1, pp. 25–30.

LACHISH.—FLINDERS PETRIE'S EXCAVATIONS.—We take, from the annual report of the general committee of the Palestine Exploration Fund, the following account by Mr. Petrie of his recent excavations on the site of Lachish.

After lengthy delays, officially, I was able to begin excavation for the Palestine Exploration Fund in the middle of April. Nothing was known of the history of pottery in Syria, and therefore nothing had been done in past surveys and explorations towards dating the various *tells* and *khurbehs*. It had been necessary, therefore, on applying for a site to trust to the identification by names; and there seemed little risk in expecting that Umm Lâkis and 'Ajlân—one or other, if not both—would prove to be Amorite towns, Lachish and Eglon. Some other ruins were included in the legal limit of area of 9½ square kilometres for the permission. Among them, most happily, was Tell Hesi. I left Egypt for Syria, arriving at Jaffa on March 9. Although the permission was signed, it did not reach Jerusalem till March 29. For nearly three weeks, therefore, I was unable to forward the business. Meantime I was able to examine and discuss the various buildings and remains of masonry with Professor Hayter Lewis and Dr. Chaplin; and thus I learnt something about the antiquities, but I found how provokingly little is positively known and in what a vast uncertainty almost every question still remains. It was not until April 14 that I could begin work. I had already visited the various sites included in the area of permission, but found that all but one were of Roman age and unimportant. The only prominent place was Tell Hesi, in the Arab country, six miles from the village of Burer, where we had to settle to begin with. But as Umm Lâkis had been supposed to be Lachish, and it was the nearest site to the village, three miles off, I determined to examine it. My expectations of it were quite confirmed. We trenched about all over the ground down to the undisturbed native red clay; but there were only six or eight feet of earth, and pottery of Roman age was continually found in it; while, most decisively, a worn coin of Maximian Hercules (*circa* 300 A. D.) was found within two feet of native clay. Khurbet 'Ajlân appeared far less promising than Umm Lâkis; there is very little extent of artificial soil, very little pottery about it, and what there is shows Roman age.

We then moved and established ourselves at Tell Hesi, which appeared to me to be a very important city of early date. We will first notice what reasons there are for believing this to be Lachish, and then we shall see how valuable the literary notices of its history become in understanding the site. Lachish was one of the five strongholds of the Amorites, with Jerusalem, Hebron, Jarmuth and Eglon (*Jos.* x. 5). And it continued to be one of the strongest places in the country down to the invasions of Sen-

nacherib and Nebuchadnezzar, to both of whom it was a special object of attack. It must, therefore, have had some natural advantages, and from various other notices (especially Eusebius) it certainly lay in the low country in this district. Now at Tell Hesý is the only spring for miles around, a brackish brook trickles down from Tell Nejileh, where in ancient times it was confined by a massive dam; and at Tell Hesý it is joined by a fine fresh spring, while the whole of the water is swallowed in the stony wady within a few hundred yards lower, and never reappears. It is certain, then, that Tell Hesý and subordinately Tell Nejileh must have been positions of first-rate importance from the time of the earliest settlements. They would thus agree to the character of Lachish and Eglon. The history of Tell Hesý begins about 1500 B. C., and ends about 500 B. C.; while Tell Nejileh, as far as can be seen on the surface, is of the same age, or ruined even earlier. The absolute point of date is the position in Tell Hesý—at half to three-quarters of the height up the mound—of the thin black Phœnician pottery which is known in Egypt to date from about 1100 B. C. While the close of its history is fixed by the fragments of good Greek pottery on the top of it, and the total absence of Seleucidan and Roman objects. There are then no sites in the country around so suited to the importance of Lachish and Eglon as these two Tells; and conversely there are no recorded places of such primary value as these must have been, except the two Amorite capitals of the low country, which we know to have been near together. The transference of the names in late times to settlements a few miles off is probably due to the returning Jews not being strong enough to wrest the springs from the Bedawin sheep-masters.

The actual remains of Tell Hesý consist of a mound which is formed of successive towns, one on the ruins of another, and an enclosure taking in an area to the south and west of it. This enclosure is nearly a quarter of a mile across in each direction, and is bounded by a clay rampart still seven feet high in parts, and in one place by a brick wall. This area of about 30 acres would suffice to take in a large quantity of cattle in case of a sudden invasion; and such was probably its purpose, as no buildings are found in it, and there is but little depth of soil. The city mound is about 200 feet square; its natural ground is 45 to 58 feet above the stream in the wady below, and on that the mass of dust and ruins of brick walls rises 60 feet. The whole of the east side of the town is destroyed by the encroachments of the valley, which here makes a great bend that has enabled the winter torrents to eat away this side. But for this fact we should have been unable to reach anything much of the earlier ages here; but in the section cut away in a steep slope above the wady every period is equally exposed. We can thus see the succession of the walls of the town and trace its history.

The earliest town here, on a knoll close to the spring, was of great strength and importance; the lowest wall of all being 28 feet 8 inches thick, of clay bricks, unburnt; and over this are two successive patchings of later rebuilding, altogether 21 feet of height remaining. Such massive work was certainly not that of the oppressed Israelites during the time of the Judges; it cannot be as late as the Kings, since the pottery of about 1100 B. C. is found above its level. It must, therefore, be the Amorite city; and agrees with the account that "the cities are walled and very great" (*Num.*, XIII. 28), "great and walled up to heaven" (*Deut.*, 1. 28), and also with the sculpture of the conquests of Ramessu II, at Karnak, where the Amorite cities are all massively fortified. So far as a scale of accumulation can be estimated, the foundation of the city wall would have been about 1500 B. C., and thus agrees to the time of the great Egyptian conquests of the land, beginning under Tahutmes I, at that date. The need of a defence against such a well-organized foe probably gave the great start to fortifying in Syria. On both outside and inside of this wall is a great quantity of burnt dust and ashes, with fragments of pottery; and we can now exactly know the character of the Amorite pottery.

This fort, after repairs which still exist as solid brickwork over 20 feet high, fell into complete ruin. No more bricks were made; rude houses of stones from the stream were all that were erected; and for long years the alkali burner used the deserted hill, attracted by the water-supply to wash his ashes with. This corresponds to the barbaric Hebrew period under the Judges. This period is marked by a stratum of 5 feet of dust and rolled stones out of the valley below, lying in confusion on the ruins of the great Amorite wall. These remains clearly show a barbaric period, when rude huts of the nearest materials were piled up only to fall soon into ruin. Then, again, the town was walled. Phœnician pottery begins to appear, and some good masonry—evidently of the age of the early Jewish kings. This period of wall-building and fortifying goes on with intermissions and various destructions until the end of the history. Successive fortifications were built as the ruins rose higher and the older walls were destroyed; Cypriote influence comes in, and later on Greek influence, from about 700 B. C. and onwards. The great ruin of the town was that by Nebuchadnezzar, in about 600 B. C.; and some slight remains of Greek pottery, down to about 400 B. C., show the last stage of its history. Happily the indications can be interpreted by our literary records, otherwise we could have discovered little about a place in which not a single inscription or dated object has been found. The first of these walls is the most solid, being 13 feet thick, and this probably belongs to Rehoboam's fortification of Lachish (*II Chron.*, XI. 9); for, though David and Solomon doubtless did some building (*II Chron.*, VIII. 2-6), probably this was more in the outlying

parts of the kingdom. Probably to this fortifying of Rehoboam we must attribute the wall which I have traced along the north and west of the town, forming a tower at the northwest corner. The four rebuildings which may be traced on the east-face section must belong to some of the fortifying mentioned as having been done under Asa, Jehoshaphat, Uzziah, Jotham and Manasseh. That the main building here does not belong to later times than Nebuchadnezzar's destruction is shown by the scanty remains of post-exilic times found on the very top of the mound, a Persian coin and pieces of Greek pottery of the fifth century. On the south side a different character of walls is found; one of the later being a massive brick wall 25 feet thick, and still of a considerable height. Probably this belongs to Manasseh's work, about 650 B. C. This was built over a great *glacis* slope, formed of blocks of stone faced with plaster, which can be traced for forty feet height of slope; perhaps this may be attributed to the hasty defences by Hezekiah at the time of Sennacherib's invasion in 713 B. C. A flight of steps of rather rough stones led us to an ascent of the *glacis*, which has now perished in the valley, and there is the gateway of a building at the foot of the steps, the rest of which has likewise been washed away. As this building may be attributed to about 700 B. C., or earlier, its character is important in the question of stone-working. There is the system of drafted stones, with a smooth edge, and a rough lump on the middle of the face; but there is no trace of the "claw tool," or rather comb-pick, as it may be more intelligibly described. On the masonry at Jerusalem this is a constant feature, and we will notice later on the importance of this matter. This *glacis* slope overlies the earth, which is piled 10 feet deep around a large building, the line of which I have traced on the east side. This building is 85 feet long, with walls of clay brick over four feet thick. It must be considerably earlier than the *glacis* to allow of ten feet of accumulation; and as the *glacis* is not likely to be earlier than Hezekiah, the building can hardly be of Ahaz; but it rather belongs to the long and flourishing time of Uzziah. Indeed, on a regular scale of accumulation of deposits, we should need to date it back to Jehoash; but we can hardly be too early in dating it to 800 B. C. Then ten feet below this is another clay-brick building, which we should accordingly have to date back to 900 B. C., or earlier—perhaps 1000 B. C. It has, moreover, been ruined and burnt and then constructed out of the old materials very rudely. Though of clay-brick, it had doorways of fine, white limestone, and some precious slabs of these yet remain, turned upside down in the reconstruction. Four of these show us a curious form of decoration by a shallow half-pilaster, a very sloping shaft, resting on a low cushion or quarter-round base, and with a volute at the top, projecting, without any separate capital or line, across the shaft.

We are here face to face at last with work of the earlier Jewish kings, probably executed by the same school of masons who built and adorned the temple of Solomon. We see decoration which we must suppose to be closely akin to that of Solomon's time—if not, indeed, as early as that itself. We learn that the Ionic volute, which the Greeks borrowed from Asia, goes back to the tenth century in Asiatic art; and we can hardly fail to see its origin from a ram's horn, thus leading us to a pointed suggestion as to the form of the "horns of the altar." Besides these wall-slabs there are fragments of a cavetto moulding from the lintels of the door, exactly like that of the early Jewish monolith shrine at Siloam. Three of these pilasters have been found, and, though not thought worth removal by the Turkish officials, not one of them can come to England. I have taken casts and photographs of them, and carefully reburied them in known spots. Besides these, one of the slabs had a graffito on it representing a lion (?) walking; and as it was upside down it must have been scratched in the time of the first building. Unfortunately the remainder of this building is beneath 30 feet of earth, and the small prospect of there being anything else of importance in it makes it scarcely worth while to undertake such a weighty clearance. No small objects have been found in the ashes so far.

Another matter of importance in itself, and of inestimable value for future exploration, is the fixing of a scale of dated pottery. Poor as Tell Hesry is in some respects, it is full of potsherds; and the chance of such a grand section as that of the east face from top to bottom gives us at one stroke a series of all the varieties of pottery during over a thousand years. We now know for certain the characteristics of Amorite, of earlier-Jewish and of later-Jewish pottery influenced by Greek trade, and we can trace the importation and the influence of Phœnician pottery. In future all the tells and ruins of the country will at once reveal their age by the potsherds which cover them. Without entering on details, we may distinguish the Amorite by the very peculiar comb-streaking on the surface, wavy ledges for handles, and polished red-faced bowls, decorated by burnished cross-lines. These date from about 1500 to 1100 B. C., and deteriorate down to disappearance about 900. The Phœnician is a thin hard black or brown ware; bottles with long necks, elegant bowls, and white juglets with pointed bottoms. Beginning about 1100, it flourishes till about 800 B. C. It develops into the Cypriote bowls, with V-handles, painted in bistre ladder patterns, which range from about 950 to 750 B. C. Due also to Phœnician influence seem to be the lamps from about 900 to 750 B. C., formed by open bowls pinched in at the edge to form a wick-spout. These were succeeded in the time of Greek influence, from 750 B. C., by the same pinched type, but of Greek ware, and with a flat brim. The Greek influence is also seen in the massive bowls of drab pottery, like those of early Naukratis, and the

huge loop-handles, such as belong to both Naukratis and Defenneh before 600 B. C. All these approximate dates are solely derived from the levels of the walls and the thickness of the deposits; but they agree well with what is otherwise known.

The methods of stone-working are another great key to the age of work. In the Haram wall at Jerusalem all the stones are dressed with the comb-pick (or "claw-tool") down to the very base, as Professor Lewis states. This tool in Egypt is characteristic of Greek work, and it was used in pre-Persian work in Greece, pointing to its being of Greek introduction. Now in the masonry of the period of the kings here we have a strong test of the question; and in no part either of the gateway, steps or pilaster-slabs is any trace of comb-pick to be seen. The evidence, therefore, is strong that the tool is a sign of Herodian and later ages; and we must ascribe the whole of the Haram wall to Herod. This also strengthens the view that Ramet-el-Khallil is an early building, as no trace of comb-picking is seen on the massive blocks there, but only on the later relining of the building.

As the Turkish Government claims everything, all the perfect pottery has been taken by the officials, and the stone-work is left to be destroyed by the Bedawin. Casts, photographs, and potsherds (such as any visitor can pick up here) are all that may be brought to England. These will be exhibited this summer in London, probably along with my Egyptian collections of this season.—*Academy*, July 26: cf. A. H. SAYCE, in *N. Y. Independent*, August 28; and *Biblia* for September.

PHENICIA.

FURTHER DISCOVERIES NEAR SIDON.—As nearly as can be ascertained from reliable sources, the facts concerning the recent archaeological discoveries near Sidon appear to be as follows: In a cave near the foot of Mount Lebanon, about 2 miles distant from the Sidon seashore, five stone sarcophagi, with various finely carved figures upon them, have recently been discovered; but, as the inscriptions upon them have not yet been deciphered, and the sarcophagi, as well as the photographs taken thereof, are jealously guarded from intrusive eyes, nothing positive as to the period of classic art to which they belong can be stated with any degree of accuracy. At some later date it may be possible to give fuller details. The cave itself is 27 feet long, 2 ft. wide, and 7½ ft. high. On the upper side-wall of the cave, opposite to the entrance door, there is a mosaic of most exquisite workmanship. It represents the colored figure of a woman in most delicate mosaic, belonging, doubtless, to some distinguished old Greek family. Judging from the Greek inscription, the mosaic would not seem to be of very remote antiquity; but, owing to its incomparable beauty and perfection, it will prove a most valuable addition to the collection of the

Imperial Ottoman Museum at Constantinople. Another authority claims that there are two figures of women in mosaic, one in green, the other in blue, both being pronounced to be Phœnician remains.

Other objects, found in another site, are columns, figures, statuettes, and various ornaments of Greek workmanship, of all of which photographs have been made and sent to the Museum at Constantinople, where the originals are soon to follow.—(*U. S. Consular Reports*) E. BISSINGER, United States Consulate, Beirut, January 27, 1890: cf. *Athenæum*, June 21.

A SIDONIAN CIPPUS.—M. RENAN presented to the *Acad. des Inscr.* a reproduction of a *cippus* from Sidon with a Phœnician inscription which he thus translates: "This offering was given by Abd-Miskar, son of Abd-Lesept, second magistrate, son of Baal-Sillekh, to his lord Salman; let him bless." The god Salman is of Assyrian origin, and enters into the name of Salmaneser and that of the Palmyrene goddess Selamanis. The offering mentioned was the *anathema* placed on the *cippus*.—*Paris Temps*, April 29.

ASIA MINOR.

PROFESSOR RAMSAY'S EXPLORATION IN ASIA MINOR (cf. pp. 197-8): **NOTES FROM PISIDIA, ISAURIA, AND KAPPADOKIA.**—W. M. RAMSAY and D. G. HOGARTH write to the *Athenæum* (of July 26 and Aug. 16): "During twelve days spent in the Pisidian mountains we have completed the first instalment of our task this year, namely, to supplement and connect previous surveys of the geographical and archaeological features of the country about the great lakes. We left Smyrna on June 14, and travelled up the railway to its new terminus at Dinari (Kelainai-Apameia). The extension, lately completed by the energy of Mr. Purser, from Seraikeny to the head of the Maiandros, is the greatest step in the development of Anatolia which has been taken for centuries. For the tourist the line does much: Hierapolis, Laodikeia, and Kolossai are now within two or three miles of railway stations, and can be visited with ease and comfort. At *Dinari*, we copied half a dozen new inscriptions, two, one Latin and one Greek, being of unusual interest; and we left it on June 16. In the course of the next two days, we visited the sites of *Konana* and *Seleukeia Sidera*, and obtained inscriptions of little interest. The third evening found us at *Egerdir*, and we took the opportunity of visiting the ancient monastery which has survived on the island of Nisi in the lake. It possesses a *ms. lectionarium* of the fifteenth century. Hence, we struck into the wildest part of Pisidian Tauros. We first crossed into the valley of the Upper Eurymedon, and found at *Tofalas*, near the site of *Timbrias*, a number of curious Pisidian epitaphs. A very long ride, during which we had to cross country of terrible difficulty, brought us to Kara Bavlo, the site of Adada, discovered by Schönborn, and since visited by Professor Sterrett.

"The situation of **ADADA** is certainly striking. In a country that consists chiefly of impassable mountains it is a really important road-centre; amid a wilderness of rocks it commands a large extent of most fertile territory. We had great difficulty in finding it, and still greater difficulty in leaving it; and our experience was the best proof that the country can hardly be traversed except along a few routes, almost all of which pass through Adada. We found no road that is not indicated in Kiepert's most recent map, but we learned that some of his lines indicate routes which could never be made passable, except by unlimited tunnelling and bridging, while others, though poor enough at present, might easily be put in a very fair condition. The latter pass through Adada. This knowledge, which could not be got from previous travellers, introduces order into the topography of this whole district. Prof. Sterrett has very briefly described the ruins of Adada, whose name he did not know, and has copied the inscriptions with great diligence and accuracy. We had only about six hours of daylight available for work at Adada, and most of this was taken up in making a rough survey of the extensive and remarkably well-preserved ruins. The city, as Mr. Headlam first observed, occupied originally a small hill (called by Sterrett the acropolis), and a larger double-peaked hill to the southwest of it. The lines of fortification of this earlier city, partly natural and partly artificial, lay high above us on the right, wall above wall, as we approached by the road from Perga. This Pisidian hill-fortress, under the prosperity and peaceful government of the Roman Empire, was extended to the north so as to fill great part of a valley shut in by hills of no great height. This larger city whose extreme length was about 700 yards, with a breadth of about 200, was not fortified. The Agora lies partly inside and partly to the north of the earlier city, whose walls were destroyed in part to allow of the extension. It extended probably up to a building of peculiar shape, in fair preservation, about 180 yards north; but great part of it is a heap of confused ruins. Our survey indicates roughly the situation and shape of all the buildings which can be distinguished with certainty, but necessarily leaves out the great majority. 200 yards further north there are three small temples, in two of which the walls are practically complete. Inscriptions show that the city contained temples of Aphrodite, of Serapis, and of the Fatherland, and that the cultus of the emperors was associated with and put before each of the other cults; but there are difficulties, which need not be here mentioned, in assigning the names to particular buildings, owing to the fact that Prof. Sterrett is not quite so accurate in stating the locality of his inscriptions as in copying the text. Of his thirty-four inscriptions we saw only fourteen, besides one which he had not observed; a few we copied more completely, but in most we only confirmed his text. With little

trouble and no great expense the mass of ruins might be sorted and thoroughly examined, the whole plan of the city discovered, and a great deal of information obtained about its condition under the Empire. For a picture of society, as it was formed by Græco-Roman civilization in an Asiatic people, there is, perhaps, no place where the expenditure of a few hundreds would produce such results. Those who hold the opinion that the most important and interesting part of ancient history is the study of the evolution of society during the long conflict between Christianity and paganism will not easily find a work more interesting and fruitful at the price than the excavation of Adada. The modern name, *Bavlo*, is undoubtedly the Turkish pronunciation of Παῦλος. Numerous examples occur where the modern name is that of the patron saint of the church in the ancient city. Adada then was under the protection of the apostle. A mile south of the city, by the road to Perga, stands a little church, apparently of fairly early character, with the separating wall between the place for penitents and the body of the church, and with triple apsidal termination. This church might probably repay examination.

"The difficulty of getting through the mountains to the southern end of the Beysheher Lake can hardly be exaggerated. Three days of continuous riding brought us to Kashaktu at the southwestern corner of the lake; three-quarters of an hour to the east, on a spur of the hills, is a walled site, which there can be little doubt must be identified with the Roman colony *Parlais*; and the identification is supported by the presence of Latin inscriptions in neighboring villages. The ruins are situated precisely in the position assigned on general grounds to *Parlais* in the forthcoming *Historical Geography of Asia Minor*.

"From Beysheher to Konia we took the horse road by Fassiler, thence, southward to visit the sites of *Lystra* and *Derbe*, and to make a tour in Kilikia Tracheia.

"We spent July in the Isaurian Tauros and Southwestern Kappadokia. Our route, on leaving Konia, lay due south to the site of *Lystra* (Khatyn Serai). Here we copied a few new inscriptions and verified old ones, among the latter the milestone in the graveyard of Kavak, of which we obtained a more accurate copy, which establishes the line of the Roman road from Laranda and *Derbe* to *Lystra*. Some miles to the southeast we found another inscribed milestone upon the same road, standing, probably *in situ*, upon a bridge over the Tcharshembi Su. With the exception of *Dorla*, which is full of late epitaphs, the villages in this district contained nothing of interest, and we passed on rapidly by the site of *Derbe* (which should be placed at Gudelissin rather than at *Losta*) to *Karaman*. It should be mentioned that we visited *Dinorla*, where Prof. Sterrett placed *Nea Isaura*,

and were convinced from an inspection of the ruins that the identification is impossible.

"From Karaman we elected to travel over Tauros by the easternmost of the two roads to Mut, that passing by Kestel, where we expected to find traces of Koropissos. Nor were we disappointed, for immediately below the village, ten hours from Karaman, we found a ruined city, occupying a strong position above the Tehiri Su. Of the earliest foundation—*Koropissos*—little remains. The imposing structures which make the site remarkable belong to the later Christian city, renamed (as we learn from the *Notitiæ*) Hierapolis, while the fine acropolis whose towers crown the southern extremity of the plateau is later still, and almost certainly represents the Armenian fortress Sivilia, passed by Frederick Barbarossa on his march to Seleukeia. Inscriptions we looked for in vain, but had a hard day's work photographing and planning the site. Of a fine early church we made a detailed plan, and traced successfully the disposition of streets and buildings over the rest of the city area.

VI-Century Monastery.—"We next attempted to find the ruins at *Kodja Kalessi*: we found a guide at Mut, and the ruins four hours to the north-west. They proved to be those of a great monastery: the church, a very fine specimen of sixth-century architecture, is wonderfully complete, and no agencies but those of nature have contributed to its overthrow. The plan of the other buildings is easily traced. From the evident importance of this lonely monastery, and from the character of its architecture and elaborate ornamentation, it seems very probable that *Kodja Kalessi* represents the monastery of Apadua, built, according to Prokopios, by Justinian in Isauria. We made plans of the whole group of buildings and drawings of the church, took several photographs, and copied some rock inscriptions. One of the latter will give us a date: it was evidently cut by a monk in his own lifetime; for after recording that he was *πρεσβύτερος* and *παρὰμονίσιος* of the monastery from the consulship of *Gadamippus* (*Ga[ius]? Damippus*), he left a blank space for the date of his death, which, alas! no one has been found to fill.

"Near Mut we discovered the remains of a city, probably *Dalisandos*; the ruins are of late character, but abound in inscribed sarcophagi. In Mut itself we were fortunate enough to find two new inscriptions of considerable interest: one is a dedication to Zeus Proasteios; the other contains the name *Claudiopolis*, thus confirming, at last, Leake's conjecture as to the identity of the site.

"The rest of our time in the Kalykadnos valley was spent in the vain endeavor to find *Diokaisareia*. In the course of the quest we discovered a solitary temple of the Roman period in very good preservation, and a fort. The ruins about the former were not considerable enough to warrant our

identifying the site as Diokaisareia, but it appears certain that that city must have been somewhere not far away. But no one appeared to know of any other ruins; so we gave it up, and struck the Ermenek road at Inai-bazaar, and descended to Selef'keh.

Visit to Olba and Korykos.—"On our way from Selef'keh to the north we visited some of Mr. Bent's brilliant discoveries of this year. We went first to Olba, the ruins of which are among the most interesting in Asia Minor, and fully justify Mr. Bent's description in the *Athenæum* of June 7 (see pp. 351-4); but the temple, though imposing to a distant view, is a great disappointment, being coarse and bad in style without any trace of archaic character. We must express our high admiration of the care and thoroughness with which Mr. Bent examined this and other places that we visited. The way in which he concentrated his work on a small district may be recommended to all archæological travellers, and his splendid discoveries in a country recently visited by such explorers as Langlois, Duchesne, Sterrett, etc., prove that this method is the one most likely to be successful.

"From Olba we made an excursion to the coast to see the great Korykian inscription discovered by Mr. Bent. We, of course, concede to Mr. Bent the task and the honor of publishing his discoveries; but, as our experience has always been that a first visit cannot exhaust the possible discoveries on any site, we considered that the plan of our journey required us to visit these important remains, and after we have seen them the best way seems to us to place all our results at Mr. Bent's disposal in publishing his account of his journey.

"The city of Olba, like that of Tyana, consisted of two parts, the fortified *polis* and the *hieron* with the town that grew up around it. The latter is about two and a half miles west-southwest of the former, and it was wholly undefended until about the time of Augustus, when the tower described by Mr. Bent was built under the priest Teukros, father of the Ajax who struck a well-known series of coins between 11 and 15 A. D. This tower has originated the modern name Uzunja Burdj, 'the Long Tower,' while the city proper still bears its old name under the form Oura. The *hieron* had a better situation than the *polis*, and almost all the finer buildings and the architectural features of the city during the Roman period were placed beside it; but the *polis* was still inhabited, and about 200-210 A. D. an aqueduct was built to supply it with water. This aqueduct bears a dedication, justly described by Mr. Bent as 'dreadfully obliterated,' in honor of Septimius Severus, Caracalla (Geta erased), and Julia Domna. But, like Komana, the site of Olba is, on the whole, a great disappointment: the inscriptions are few and uninteresting (except those just mentioned and a Christian epitaph with the name *Sandansaka*), and about the priest-kings of this historically interesting city we learn nothing.

"Mr. Bent's great inscription at Korykos cannot be taken as a list of the priest-kings of Olba. In the first place, it does not contain the name of any of the known priests of Olba. In the second place, it is engraved on the temple at Korykos, and we cannot agree with Mr. Bent in assigning to Olba any authority over such cities as Korykos or Sebaste, any more than we can accept the statement that it was ever metropolis of Isauria in Christian times. Sebaste in particular was a much more important place than Olba, moreover, the position of the inscription and the character of the names suggest a different explanation. The inscription was discovered by Mr. Bent in the wall of a Christian church, which is obviously of no very early date. This church was made by utilizing the temple which stood beside the brink of the Korykian cave. The walls of the *cella* were raised higher, and an apse was built on at the eastern end: the additions are of coarse work, and can be detected at a glance. We made a plan, showing the relation of the two buildings and indicating the *peribolos*-wall of fine polygonal masonry that surrounded the temple. The southern *anta* of the temple has disappeared; the northern still stands, wanting only the uppermost course of stones. The great inscription covers the whole of the front of the *anta*; but the loss of the top stone has deprived us of the preamble. The rest consists of an enumeration of citizens, probably of Korykos, and may fairly be taken as the list of those who subscribed to build the temple, probably about the beginning of the first century after Christ. The inscription was engraved on the stones before they were put into their places in the wall, and by an error of the builders two of the stones were turned upside down as they were placed in position. Our copy, which is almost complete, and the plans of the temple, of the two cities at Olba, and of some other places (several done by Mr. Headlam), have already been offered to Mr. Bent to make use of in his account of the work.

"*The Roman road from Laranda, by Koropissos and Olba, to Sebaste* was traced by us at various points of its course, partly by cuttings and levels, partly by the pavement and the milestones. We had never travelled along a Roman road with the original pavement unaltered, except by time and weather, and with the milestones still in their original position, until we traversed the last fifteen miles to Sebaste. Most of the stones were either illegible or uninscribed, but we obtained several inscriptions, showing that the road was constructed under Septimius Severus.

Visit to the Hittite Rock-relief at Jorcez.—"From Uzunja Burdj we crossed the mountains to Eregli, and thence made a *détour* to Jorcez. Our object was to obtain impressions of two of the inscriptions near the great 'Hittite' rock-relief, but we succeeded only with the lower one. However, we made careful copies of all the texts, redrew certain parts of the figures which have been inadequately represented, and took several photographs of the whole

relief. In almost all points we find that the drawing published in the *Archäologische Zeitung*, 1885, was a great improvement on that of Davis, reproduced in Wright's *Empire of the Hittites*. The water of the millstream which flows at the foot of the 'written rock' was low, and we were able to copy several new symbols in the lowest inscription. Of the whole monument we must say that it yields to no rock-relief in the world in impressive character.

Purchase of the Hittite Inscription at Bor.—"Two days later we reached Bor and set about finding the celebrated incised Hittite inscription, discovered there in 1882. Its owner, as before, would allow no squeeze or copy to be made. So we succeeded in buying the stone outright. We conveyed the stone forthwith to Nigdé, lodged it in the care of the governor, and wrote to Constantinople offering it to the Imperial Museum. We hope to convey it thither after our tour in the Anti-Tauros.

"Still more fortunate was our discovery on the next day of a second incised stone, so far similar to the first that it must be a part of the same series of reliefs. It is more than probable that others of the series exist, above or below ground, and all come unquestionably from Kiz Hissar (Tyana). The second stone has been cut into a round shape in modern times, and many of its symbols lost; but a bearded head remains and a large part of the inscription. The characters are, perhaps, somewhat more elaborate than those of the first stone, but their essential character is the same."

AUSTRIAN EXPLORATION.—Prince John of Liechtenstein has offered to the Academy of Wien an annual subvention of 5000 florins for five years, to carry on the archaeologic researches commenced by the Austrian expedition in Asia Minor.—*Revue des études grecques*, 1890, p. 101.

KIEPERT'S MAP OF WESTERN ASIA MINOR.—From Dietrich Reimer, Berlin, we receive the first four out of fifteen sheets of a map, by Dr. Heinrich Kiepert, of Western Asia Minor on a scale of 1:250,000. In this work the veteran cartographer, now just completing his seventy-second year, returns in part to an early task. Half a century ago, as he relates, Moltke and other Prussian officers, on coming home from the Turkish service, intrusted to him the geographic data amassed in their official military journeys in Asia Minor, to which he added his own recent observations in the western portion of the peninsula, and, availing himself of all extant literary sources, produced in 1844 a map of Asia Minor on a much smaller scale than the present fragment (1:1,000,000). This map, repeatedly copied, and which has been of the greatest utility to travellers, has hitherto not been superseded, though the Russians have for political purposes within twenty years constructed a larger one (1:840,000). Dr. Kiepert has now used a great deal of unpublished material, and has received much

aid from the labors of archaeologists like Profs. Ramsay and Sterrett (who repay their debt to him), especially in the identification of places; all which he acknowledges most conscientiously and in detail. It is needless to add more to this account of Kiepert's always authoritative work. He has supplied the Turkish and the classical names, using for the former the transliteration recommended by a committee of the Paris Geographical Society. French and English equivalents are often annexed.—N. Y. *E. Post*, July 7.

HISSARLIK=ILION.—EXCAVATIONS BY DR. SCHLIE-MANN.—Dr. Schliemann writes in the *Neue Freie Presse* of June 11: "The excavations which I commenced at Ilion with the help of Dr. Dörpfeld on Nov. 1 of last year and broke off in the middle of December, on account of the winter, were again taken up at the close of February. I had set for myself the main task of uncovering the continuation of the three gate-streets in the lower city, and of bringing to light as much as possible to the south and west of the Pergamos. But great difficulties lay here in our way: the mass of rubbish had a depth of over sixteen metres and consisted of the ruins of the walls of houses erected here by successive settlements in the course of ages; these it was first necessary to carefully excavate and clear, in order to photograph before tearing them down. My work was outside the great enclosing wall of the second city, which was destroyed by some frightful catastrophe; the Romans had destroyed, in the centre of the acropolis, the walls of the houses that form the *débris* lying directly above this layer, in order to raise a plateau; while here, near the walls of the citadel of the Roman city, the house-walls with their foundations are preserved, on the average, to a height of about one metre. They point to four settlements which succeeded one another, in the course of centuries, after the fall of the fifth prehistoric city. By far the most important of these is the *Roman*, whose buildings often have foundations descending to a depth of five metres. Above this comes the *Greek*, then the *archaic Greek*, and, still further below, an *earlier settlement which may be contemporary in date with the palaces of Mykenai and Tiryns*. It is true that the walls of these different periods have, as a rule, no characteristic marks by which they can be distinguished; for they all consist of stones bound with clay-mortar and only very seldom is the Roman lime-mortar used. But the pottery found in great quantities in the houses can leave no doubt as to the age of their construction. More interesting than the Roman and Greek pottery of the classic period are the archaic terracottas of the fifth and sixth centuries, which are often very artistically painted, and were doubtless imported from Greece. It is doubtful, however, whether the theory of importation can be sustained with regard to the vases with geometric patterns of the so-called Dipylon style, or for the terracottas of

the Mykenian and Tiryinthian types among which the *Bügel-Kanne* is especially remarkable. For in Hellas the culture which produced these types came to an end, without leaving a trace, toward the beginning of the twelfth century B. C. through the migration of the Dorians or the so-called return of the Herakleidai: this, in its turn, called forth the Aiolic migration to Asia Minor and especially to the Troad; and so it appears to me more probable that a great deal of pottery belongs to it (Aiolian), and that its art became naturalized in Ilion. This conjecture appears to us all the better grounded that in the fourth settlement mentioned above as contemporary with the prehistoric Hellenic type of colossal masses there appears a kind of monochromatic grey pottery of entirely different form and mode of manufacture, which I had previously held to be Lydian and described in detail in my work *Ilion*, in treating of the sixth city, but which I now must regard as decidedly of native manufacture. For, since writing that book I have—as may be seen in the Trojan collection in the Ethnological Museum in Berlin—come across similar pottery in my excavations in Kebrene, Kurschunlu-Tepe (the ancient Skepsis and Dardania), in the earliest period of the small settlement on the Bali-Dagh behind Burarbaschi, in Eski-Hissarlik, on the Fuln-Dagh, and in the tumuli which are ascribed by tradition to Achilles, Patroklos and Priamos. The house-walls to which this gray ware belongs were cleared away by the Romans in the centre of the city; . . . but, nearer the city-walls are left, . . . and among them are several fortification-walls which may with probability be ascribed to this settlement. Rude hammers, fine axe-heads of cut diorite, corn-crushers, oval hand-mills, knives of silex, etc., are often found in the *débris* of this settlement; while at the same time there also appear long needles with globular or spiral heads which before the invention of the *fibula* served for fastening the hair or clothes.

“Underneath these ruins we came (as before in the excavations of the city proper) upon house-walls of three prehistoric settlements before reaching the level of the second or burnt city which must have existed for a number of centuries. Beside the earlier fortified wall *b* and the later *c*, Dr. Dörpfeld’s sagacity led to the discovery of an even older encircling wall of the second city, which, with its towers, is strongly scarped and well preserved; here also the superadded construction is of crude-bricks. We found in the house-walls of the second city three kinds of rebuilding. To the city of the third and last reconstruction, which perished in some great catastrophe, belonged only six or seven large buildings which were all parallel and ran from S. E. to N. W. The walls, 0.85 to 1.45 met. thick, were provided with *parastadoi*, and consisted, below, of stones joined by clay and, above, of sun-dried bricks. The largest building [perhaps a royal palace *D*] (A on plan VII in my *Troja*) contained a hall 20 met. long by 10 met.

wide; the remaining houses are somewhat smaller, but it can be assumed with certainty that a citadel adorned with such stately buildings must have had a proportionately large lower city. We have for a long time been occupied with bringing to light the foundations of the buildings of the two earlier periods, in order to draw up a plan of them. All are constructed in the same manner, as is attested by the masses of crude brick that lie between the house-walls and in front of the fortifications. In the first epoch of the second city we still find a brilliant monochrome black pottery, which seems remarkably like that of the first city, and which little by little becomes improved until it approaches the terracottas as they appear in the third epoch of the second city. On the southern and eastern sides we have uncovered the citadel walls of the third epoch of the second city with its towers, along almost its entire length; and the many signs of powerful heat, which appear on both sides of them, leave no doubt that they were provided with a covered gallery of wood, like that which is referred to as existing on the encircling wall of Athens.

"The walk marked *BC* on plan VII [on the N. E. side of the citadel], which we had conjectured to be a wall belonging to the lower city, has been with great difficulty excavated from a stony mass of rubbish sixteen meters high. It proves to be a ramp by which the citadel was reached, as at Tiryns. Most interesting are the steps by which this ramp was once ascended. Similar but even more primitive steps were uncovered on the south side of the citadel before the S. E. gate. At the S. E. end of the Roman acropolis we excavated a small theatre which may have served as an Odeion, but its covering is fallen and destroyed. The theatre is preserved up to the upper row of seats, which rested upon the surrounding walls formed of great blocks of stone, but are now wanting. The material is a hard limestone; only the lower row of seats is of marble. Two life-size marble statues were found in it, one of which apparently represents the Emperor Claudius I. In any case, the theatre belongs to the first imperial period, as two marble blocks were found bearing inscriptions one of which was of the time of Tiberius."—*Berl. phil. Woch.*, 1890, No. 26.

Dr. DÖRPFELD, on his side, summarizes the campaign in a contribution to the *Athen. Mittheil.*, xv, 2, pp. 226–9. He says: "Our main object was: (1) to determine the surrounding walls of the Pergamos at the different periods; (2) to complete the plan of the second city, the Homeric Pergamos; (3) to study separately, at a spot where this is still possible, the ground-plans of the upper settlements; (4) to uncover a portion of the lower city; and (5) to search for the early tombs. A part of this was accomplished in the middle of June." Dr. Dörpfeld's report gives a number of architectural facts more fully than Dr. Schliemann's. An important discovery was that of two more *parastadoi* or portions of piers belonging to build-

ing c. This had been, until now, only conjectured to be a *propylaion*: now, this identification is certain, and so further evidence is gained for the close relation between the constructions of Tiryns and Troy. West of the s. w. gate a large section was excavated which lay outside the acropolis of the second city: later, it was enclosed within its limits, and contained houses and other buildings belonging to the upper cities. Each stratum was here freed, surveyed, and photographed. In this way, a ground-plan was obtained of all the buildings which were erected over the ruins of the second city. "As soon as we have reached, on this site, the lowest strata, we hope to settle the question whether on this side a lower city was annexed to the Pergamos of the Homeric Iliion. Perhaps even the royal tombs lay directly in front of this gate: we have been, until now, as unsuccessful in our search for them as at Tiryns." The declivities of the citadel, where these tombs would be sought for, are covered up with old and recent *débris* to such an extent as to make research extremely expensive.

The excavation of a part of the lower city will be deferred until next year. Only one building belonging to it, s. w. of the citadel, has been uncovered, namely, the theatre. On account of the liberal attitude of the Turkish Government, it will be possible to accompany the results of these excavations with far more numerous plans than in the book *Troja*.

KILIKIA.—THE TOPOGRAPHY OF OLBA.—Mr. J. T. BENT writes to the *Athenæum* (of June 7): "In my letter to the *Athenæum* of April 5 (*JOURNAL*, p. 188) I notified our discovery of two inscriptions giving us the name of Olba. Not satisfied that this was actually the site of the capital of this ancient kingdom, and being unable owing to the season to prosecute our researches more inland, we waited until the spring, and then traversed the whole of the district from the coast to the Karamanian mountains, which in ancient times would seem to have constituted the toparchia of Olba, a part of Kilikia Tracheiotis. From an inscription on a tomb at the spot where we found the above-mentioned inscriptions we read that those who opened it were to pay so much to Sebaste, and so much to the deme of the Kanygelli, giving us the Sebaste-Eleousa of Ptolemy, which is down by the coast and mentioned by him after Korykos, and the name of one of its demes. From these premises we could safely argue that the rule of Olba extended over Sebaste, and that the priest-kings who are styled on coins 'dynasts of Olba and toparchs of Kennatis and Lalassis' must have had their capital at some other point which had yet to be found.

"From Lamas to the plain of Seleukeia the coast line is thickly covered with ruins, including the towns of Sebaste-Eleousa, Korykos, and Korasios; these ruins are, however, almost all of a very late Roman date, and an inscription at Chok Oren (many ruins), not far from the plain of Seleukeia, gives in a few words what is probably the history of most of them. It tells

us that during the reign of Valentinian, Valens, and Gratian, the governor of Isauria rebuilt from the foundations 'the spot which is called Korasios, which had become desolate and void of houses.' Whether this is the Korasion of Strabo or not is uncertain, but the name Korasios is very clear in my squeeze; at all events, it confirms Strabo's description of the devastation of this coast by pirates, accounts for the lateness of the coast-line ruins, and explains why the older inhabitants of Kilikia Tracheia preferred to live in fortified towns up on the slopes of the Tauros. The mountains in this portion of Kilikia Tracheia come right down to the sea. A second line of towns occupied the slopes more immediately above the sea level, the names of two of which we were enabled to recover from inscriptions—namely, *Eabbasis* and *Reorbasis*—each with strong polygonal fortresses and walls, and each celebrated for the worship of Hermes. Besides these there were several the names of which we were unable to find, but only the signs which were invariably put up on a corner of the towers. Here I may incidentally mention that at eight different sites we discovered the sign of the club, which eventually proved to be the sign of Olba, and, together with the *triskelis* which surmounted our Olbian inscriptions at Sebaste, is found on Olbian coins (Head, *Hist. Numorum*). This would give us as the least possible area of this kingdom a boundary on the east beyond the Lamas river, and on the west the valley of the Kalykadnos.

"On proceeding further inland, at about seven hours from the coast at Lamas, we halted for some days at extensive ruins now known as Jambeslū, about from 3,000 to 4,000 ft. above the sea level, containing fine *heroā*, a sarcophagus, the lid of which is carved into the figure of a lion with its paw on a vase, the characteristic rock-carvings, several forts, the ruins of a temple, and a large early-Christian basilica. We found only three poor inscriptions here, and were unable to recover the name, but on gateways the sign of the club occurs. The same experience awaited us at the next place, Yiennilū, the fortress of which had over the door the club between two triangles. Our next headquarters were at a small village of Yourouks known as Uzenjaburgh, over 4,000 ft. above the sea level, situated amongst very extensive ruins, which proved to be the capital of Olba. First of all, we examined the ruins of an extensive town down in a valley about three miles below Uzenjaburgh. These ruins crown a wooded height surrounded on two sides by narrow gorges crowded with rock-carvings and rock-cut tombs, and on the third side by a little fertile plain. This spot the nomads now call Oura. Prof. Ramsay previous to this imagined that the original name of Olba was *Ourwa*, Hellenized to suggest a meaning in connection with ὄλβος. In ancient times, water was conveyed to this town by a fine aqueduct from the Lamas river; and on the arches which span one of the gorges is a long inscription, dreadfully obliterated, but from

which we were able, with a considerable amount of personal risk, to get a squeeze of the words ΟΛΒΕΩΝΗΤΟΛΙΣ, and read the name of M. Aurelius Cæsar. Oura also had a small theatre, a curious fountain, and yielded one or two minor inscriptions. It is connected with the ruins around Uzenjaburgh by an ancient paved road, on either side of which are numerous rock-cut tombs and other ruins, and the name of Olba again occurred on a fallen column. It would appear that in ancient times the two towns practically joined, and formed the capital of the kingdom of Olba.

"A very large tower, four stories high, with five chambers on each floor, commands the ruins of the upper town; it is 50 ft. 10 in. by 40 ft. 9 in.; and on this fortress are four separate inscriptions, and a very neatly carved club in a frame. The most important of these inscriptions has almost the same formula of dedication as that to the Olbian Jove at Sebaste; again the same strange name *Tarkuarios* follows that of the priest-king Teukros—in the list of names referred to below we found ΤΑΡΚΥΜΒΙΟΥ, possibly Tarkyarios for life (μετὰ βίου), and we know of king Tarkondimotos of Kilikia, so perhaps the prefix Tark has some royal significance—then follows a long Kilikian name, and the inscription closes with ΤΟ ΟΡΒΑΛΗΣΗΤΑΟΛΒΕΩΣ, probably giving us the name of this fortress-town which was above the town of Olba. Amongst these ruins the most conspicuous are those of a very large temple with twelve Corinthian columns, 40 ft. high, on either side two to the front and four to the back, each with twenty-three flutings; the building is 127 ft. long, and the *proaulion*-wall which encircles it, and which is covered with marks and letters, is 222 ft. by 209 ft. This temple is wonderfully well preserved, having been a Christian church when Olba was metropolis of Isauria. There can be no doubt that this was the great temple of Zeus to which Strabo alludes, the priest-kings of which he tells us ruled over the whole of the Tracheiotis at one time, so that even in Strabo's time the terms were in use 'the country of Teukros' and 'the priesthood of Teukros' (Strabo, XII. 1).

"There are two theatres on this site, a late Roman arch, a very elegant façade of a temple of Tyche, with a long inscription which identifies it, and from another inscription we found that Dionysos also was worshipped here; and there must have been a plentiful vintage in ancient times, judging from the number of wine-presses and the vats for storing wine. The general appearance of these ruins is very striking. There must also have been a colonnade like that at Pompeiopolis, and public buildings of a large extent cover the whole of the hill-slope. The largest of the theatres, however, is very small, being only 291 ft. on its outer semicircle; behind stood a colonnade of magnificent columns; but there is a second and smaller theatre, and another at Oura. There are no traces of city

walls; but from its position on the highest ground of the immediate district, with gorges of magnificent rockiness running down to right and left as from a water-shed, and with its strong castle, the position of Olba must have ensured absolute immunity from attack. The upper town was furnished with a separate aqueduct, and drew its water supply from the sources of the Lamas beyond Mara.

LAMAS GORGE.—"Our next work was to investigate the Lamas gorge from its mouth by the sea to its source in the mountains of Karamania. It is quite one of the finest works of nature I have ever seen, being never more than half a mile wide, and the precipitous cliffs on either side offering, except at rare intervals, two continuous walls of 1,000 ft. in height. At a distance of every two or three miles we came across the ruins of castles and towns on either side, and abundant evidence of the rule of Olba from the oft recurring sign of the club. But only in one case did our inscriptions give us the name of the town, namely, **BEMISOS**, which from the magnitude of its ruins must have been nearly as large and important as Olba itself, and had its own particular sign, the shield and spear, which appeared side by side with the club.

"The features of this district are the rock-cut reliefs of men in armor with lance and spear—there are several of them in the Lamas gorge—and the sanctity of caves dedicated to Hermes and walled up with polygonal masonry. We found three of these caves in the toparchia of Olba; one near Eabbasis, three stories in height, with several inscriptions; another near Bemisos, in the Lamas gorge; and a third, also with an inscription, in a gorge near Maidan, or Reorbasis, as the town was presumably called in ancient times. On coins of Korykos, Hermes figures largely, and in this district we found many caducei carved over gateways or on the rocks.

THE KORYKIAN CAVE.—"Of course the great caves or natural holes on the plateau near the sea constitute the most familiar feature of the district, for one of them is the far-famed Korykian cave, the abode of the giant Typhon (Pind., *Pyth.*, i. 31). By stopping several days in a ruin near the edge of the Korykian cave, we were able to study it closely and supplement considerably the information given by previous travellers. At the entrance to the hole itself, which penetrates the bowels of the earth for over 200 ft., we unearthed a quaint four-versed epic cut on the rock; it is in hexameter and pentameter, and breathes the spirit of the divine mystery which here uttered the frenzied oracles. Much in the same strain is a Christian inscription over the door of a Byzantine church which blocks up the entrance to the hole.

Ruins of a Christian Church.—"Immediately above the cave stand the ruins of a Christian church, built with stones from a temple of Zeus, the

remains of which crown an eminence about a mile above the cave. At one edge of this church we accidentally discovered that stones inscribed with a list of 162 names, some with and some without patronymics, were walled up. The earliest of these show many curious Kilikian names, which run gradually into Greek names, which in their turn become mixed with Roman names. On carefully studying this long list, I am inclined to think that they form a list of the priest-kings who, Strabo tells us, ruled over the Tracheiotis, for the following reasons: *firstly*, we have the name Teukros frequently repeated; *secondly*, the name Polemon occurs, which we find on coins as dynast of Olba; *thirdly*, Hermokrates, a priest whose name occurs in an inscription at Eabbasis; *fourthly*, there are several of the name of Zenophanes, one of whom Strabo tells us was the father of Aba and one of the tyrants of Olba; and, *fifthly*, the last of the names is Archelaos, and Strabo tells us how this portion of Kilikia Tracheia was handed over by Augustus to Archelaos, king of Kappadokia, and he ruled over the whole district, except Seleukeia, until his death, when Kilikia Tracheia became a Roman province. The temple of Zeus, on the hill above, was built of similar stones, and very little of it is left standing. Hence the presumption is that this list of names was cut on the walls of the former temple, and brought down for building purposes by later inhabitants. Close to the temple we found a dedication to the Korykian Zeus in similar phraseology to that of the Olbian Zeus, and a scribbling on the wall invoking the deity."

MYTILENE=LESBOS.—C. Cichorius has communicated to the Academy of Berlin (Nov. 7, 1889) some important inscriptions discovered by him now placed in the temple of Asklepios at Mytilene where the epigraphic archives of the city were collected. He found them in the Turkish fortress which had already furnished several texts of the kind (*Revue arch.*, 1889, II, p. 119). Among the new documents there are fragments of senatus-consulta and imperial letters emanating from Augustus. Some lines of a letter of Julius Caesar are the first authentic specimens we have of his Greek style. It reads: [Γάιος Ἰούλιος Καῖσαρ αὐτοκράτ]ωρ δικτάτωρ τ[ὸ] τ[ρί]τον καθε[σταμένος Μυτιληναίων ἀρχονσι βου]λῇ δήμῳ χαίρειν καὶ ἔρρωσθαι καὶ ὑγιαίνειν. Ἐπεὶ δὲ βούλομαι εὐεργετῆν τὴν πόλιν καὶ οὐ μόνον φυλάττειν τὰ φιλόνηρωπα, ἀδὲ διεπράξ[ασθε δι] ἡμῶν, ἀλλὰ καὶ συναυ[ξάνειν αὐτά] . . . ἡσύχ[ως τὴν ἡγεμονίαν φιλίας δόγ[ματος τε ὑμῶν συγκεκριρημένον δι]απέπομφα πρὸς ὑμᾶς τὸ ἀ[ντίγραφον]. The date of this fragment is October-December 709. It is badly mutilated.—*Revue arch.*, 1890, I, p. 283.

PERGAMON.—CONTENTS OF THE GREAT SARCOPHAGUS.—The contents of the great sarcophagus, whose discovery was mentioned on p. 90 of vol. V, have been described by M. Kontoleon in the *Athen. Mittheil.*, xiv, p. 129. Among the forty-two objects are a finely-engraved agate with a bust of Hera, gold jewelry, a gold bracelet adorned with gems, a gold ring with

wall is a tessellated marble pavement, apparently well preserved, and a fragment of dark-blue marble column with twisted fluting has just been uncovered. Finds of fragments of marble statues of the Roman period have been fairly frequent, and one female head, slightly under life-size, is an admirable example of the best work of the time. It is a hopeful sign that the east side is the productive side of the site, and that heads are to be found there but little damaged.

May 10.—"One main site is now in work, that of the supposed Zeus temple in the sand. The east front wall is being thoroughly cleared down to the level of the soil. That much still remains to be done will be sufficiently apparent from the fact that the centre of the parallelogram is as yet all but untouched, that the south wall is opened only at its two eastern and western corners, that the remains beyond the limits of the colonnade wall northeast and southeast are necessarily left on one side; and even the section of the east wall, which has been so prolific of statuary, has as yet only been worked to the sand level, and the soil beneath, in which, to judge from previous digging a few weeks back, there is still plenty of spoil, has been left untouched. Thus confined as our operations necessarily are for want of funds, we have little that is new from an architectural point of view. That the large fluted columns which I described in my last report did form the east front of the temple seems now practically certain; beyond them we have just tapped, and tapped only, a mass of later constructions high up in the sand, and beneath them there are, no doubt, older remains. Of actual finds more may be said. The fortnight opened with the uncovering of a colossal nude male torso, of late but good work, to which, apparently, belong some lower portions of a similar figure found a few days before. Since then there has been added to the list a marble statue, under life-size, of the ægis-bearing Athena, in the usual pose, but wanting head and arms. The work is Roman, as is also that of another female statue now nearly complete in three fragments, but with the head wanting. Thus at one time or another in the course of the excavations quite a line of statuary has been found following the direction, but by no means preserving the limits, of the east wall.

Tombs.—"We had resolved to make some trial of the tombs; but virtually the only tomb worked is a large Roman sepulchre not far from the monastery of St. Barnabas. The villagers had already attempted to rifle it, for the shaft had fallen in, but had somehow been frightened off. The tomb is finely made—cut in the rocks—with a triple arrangement of couches on which were placed sarcophagi of terracotta. The contents, which are undamaged, are characteristically Roman—earrings, terracotta lamps and vases, glass.

June 1.—"The season's work at Salamis was brought to a close on May 24. On the 28th, the antiquities were divided with the Government, and two days hence the excavators' share will sail for Larnaca on its way to England. Of the last fortnight of work the first week was a very active one. With the second came the beginning of the wheat harvest and the news that no further funds were forthcoming. The site south of the Enkomi road, *Τοῦμπα τοῦ Μιχαήλ*, led to no tangible results beyond a quantity of fragments of inscriptions. The rock lies within a few feet of the surface, and any buildings that may have existed upon it have totally disappeared. A fresh try was made for tombs in a large field to the north of the same road. Tombs were found in abundance, which, though small, were of good construction, and of fairly early date. But all had been systematically robbed, the robbers tunnelling from one to another through the thin dividing walls. From May 16 onward, the work was confined to the sand-site.

"The progress made may be briefly summarized. The east wall, with the great marble columns, has been laid bare from end to end: the marble pavement to the east of the wall has been cleared as far as was practicable, and followed eastward in one place up to the limestone wall, which seems to bound it in that direction: at this easternmost point an admirably constructed limestone wall was discovered, extending some feet downward below the level of the pavement, and serving as a foundation for inferior late building: at the north and south ends of the marble pavement two steps, similarly paved, lead upward, and beyond them there is, at least at the south end, a marble pavement at a lower level again. All along the eastern extremity of the excavation there seem to be remains of extensive limestone building, large squared blocks, architectural fragments, and walls. These remains, together with the enormous depth of sand, hindered progress not a little. During the course of these developments, besides a number of fragments, two more headless marble statues were found, a small marble head, and the upper part, without the head, of the colossal female marble statue. With the last was a hand holding a snake, of the same scale, which seems to prove that the statue represents a goddess. Another point which was investigated during the last week of work was the centre of the site. Nothing, however, came to light but a remnant of poor wall. It must be sufficiently obvious that the sand-site is far from finished, lack of money alone stopped the work. The limestone remains at the eastern extremity of the site are of great interest, and it may be that they only commence the really important part of the building. It is noteworthy, although perhaps accounted for by the greater depth of sand, that only the east end of the site has been at all fertile in antiquities; and it must be remembered that the level of the pavement has not been passed, except in the single cutting made to investigate the above-mentioned limestone wall. Another

season's work is urgently called for, and it is to be hoped that, after so much has been done, funds will not be lacking to complete the excavation. We commend both this site and the great field offered for further operations by the ruins of Salamis to the liberality of the subscribers to the fund."—*Athenæum*, June 14, July 5.

EUROPE.

GREECE.

ODYSSEUS' FEAT OF ARCHERY.—A solution is offered, in the *Berl. phil. Wochenschrift* (1890, No. 23), of the vexed question as to how Odysseus could have shot through a line of twelve raised battle-axes. It is based upon a bronze axe-head, of pre- or early-Homeric period, which is pierced by two good-sized openings apparently in order to be sparing of the metal. Calculating for the usual length of the handle, it is evident that, if twelve such axes had their shafts stuck in the ground in a line, it would be possible to sight through these holes in their heads and to shoot through them. The main difficulty in this explanation is the fact that the Homeric text of 422 seems to indicate a hole not in the blade but in the handle.

ARTIZANS' WORKSHOPS.—N. BLÜMNER has published in the *Athen. Mittheil.*, XIV, p. 150, two vase-paintings (one found at Abai, the other on the Akropolis, and both now in Athens) which represent ceramic workshops. At the same time he publishes a basrelief of Larissa showing a carpenter working on a plank with a σκέπαρον.—*Rev. arch.*, 1890, I, pp. 261-2.

ARGOS.—INSCRIBED BASRELIEF OF ZEUS KRATAIBATES.—An interesting inscription at Katsinkri, a village near Argos, has recently been published by M. J. Kophiniotis. It runs as follows: Δ'ΟΞ|ΚΡΑΤΑΙ|ΒΑΤΑ. It is placed on the side of a square tablet of marble which contains a pediment, on which is a relief representing Zeus grasping a thunderbolt in his right hand, and with extended left. The tablet is broken into three pieces. It is of the Roman period, and probably belongs to the second century of the Christian era. The epithet *Krataibates*, applied to Zeus, is new; it is in no way to be confused with the *Kataibates*. M. Kophiniotis quotes χερμάδες κραταίβοιοι (Eur., *Bacch.*, 1096), and θώρακες κραταιγάιοι (II., XIX. 360), κραταίλεως (Æsch., *Ag.*, 652, and Eur., *El.*, 534), and κραταίπους (Pind., *Ol.*, XIII. 81). It may be assumed, therefore, that Zeus *Krataibates* was the god of the descending thunderstorm.—*Athenæum*, July 12.

ATHENS.—AKROPOLIS.—*Statues by Lykios son of Myron.*—M. Lolling has published in the *Δελτίον* (1889, pp. 179-200) a long essay on two bases of Pentelic marble, discovered near the s. w. corner of the Parthenon, in which he recognizes the bases of two equestrian statues mentioned by Pausanias

as placed at the entrance of the Akropolis and which he was inclined to believe represented the two sons of Xenophon (i. 22. 4). The study of the epigraphic fragments belonging to these bases and other reasons lead M. Lolling to believe that they were ex-votos dedicated by the Athenian horsemen after the conquest of Euboia by Perikles in 446, Lakedaimonios (son of Kimon), Xenophon and Pronapés being hipparchs. These statues were the work of Lykios son of Myron; and, if M. Lolling's hypothesis be admitted, we would have an approximate date for the ἀμκῆ of this sculptor.—*Revue arch.*, 1890, i, p. 257.

Cisterns.—In clearing the ground north of the Parthenon, several large cisterns cut in the rock were found, placed symmetrically in relation to the temple. This is important, for it shows that these cisterns, far from being Pelasgic or *Kranaian*, are not older than the fifth century.—*Revue arch.*, 1890, i, p. 257.

NATIONAL MUSEUM.—Plaster casts of the better-known reliefs are being prepared and will soon be for sale. The finds made at **LYKOSOURA** have been brought into the museum. Among these are several inscriptions of Imperial Roman times.—*Δελτίον*, Jan., 1890.

KERAMEIKOS.—Excavations in the outer Kerameikos at Athens have brought to light more than ten Hellenic graves of the fifth and fourth centuries B. C. Numerous white *lekythoi* and black and red-figured vases were found in them. One large funeral urn, 1.22 m. high and with two handles, represents Herakles slaying the Centaur Nessos and has also three Gorgons upon it.—*Δελτίον*, Jan., 1890.

ARCHÆOLOGICAL NOTES.—The excavations of the Archæological Society at Dipylon, which have been going on for some time under the care of M. Mylonos, have led to the discovery of a wall some fifty metres long and eleven high, which proceeds from the well-known monument of the ox in a northeastern direction. The discoveries made in the graves which have been opened are as yet of small account; at any rate, no sculpture has been met with. The excavations will be prosecuted further. The well-known chapel of the Hagia Triadha has been purchased by the Archæological Society, and will be pulled down, as it is hoped something of interest may be brought to light. The Government has authorized the Society to turn up the ground, which has hitherto been left undisturbed (both in 1862 and again in 1870 and in 1879) because claims were raised to it by private individuals.

An interesting purchase on the part of the Archæological Society is reported: that of one of the most ancient olive trees on the Sacred Way between Athens and Daphnion. It is said to be over two thousand years old.

The cabinet of coins has been put in order again. After the wholesale robbery which took place three years ago, the coins which were saved

were packed up and waited reārrangement. Owing to the appointment of Dr. Svoronos to the curatorship, the old plan of reōrganizatiōn, which was interrupted by the robbery, has been revived. The coins have been arranged in the wide galleries of the building of the Academy, and the most interesting are exhibited in suitable show-cases. A rich collection of plaster-casts will serve to complete the collection. The commission which is to hand over the coins to the new director will meet soon. After this is done, the work of cataloguing will be proceeded with.—SPYR. P. LAMBROS, in *Athenæum*, Aug. 23.

BRITISH SCHOOL.—The annual meeting of subscribers took place on July 2nd: the report of the Managing Committee opened by the announcement that the past session had been the most successful that the School had yet held. Twelve students had been admitted. The School had undertaken excavations at Megalopolis, and also, at the cost of the Cyprus Exploration Fund, at Salamis in Cyprus. Messrs. Schultz and Barnsley had continued their valuable work on Byzantine architecture. The donations of money had been rather more than last year, but in other respects the financial position of the School still left much to be desired. The income of 430*l.* was both inadequate and precarious, consisting as it did of subscriptions which might at any moment be withdrawn. An earnest appeal was made by the Committee for aid in placing the School upon a sound financial footing. The Director of the School, Mr. Ernest Gardner, read a report of the session.

The number of students at the School—twelve—was twice as large as that at the French or any of the other schools during the past year. After the fashion of the French and German Schools, the meetings are divided into open meetings, attended by the members of the foreign schools and others interested in archæology (papers involving original research are read by the Director and students, and reports of excavations are produced), and private meetings of a less formal nature, intended primarily for the students, at which lectures are delivered by the Director varied by discussions. Twenty-four of these latter meetings were held during the session, alternately at the School and at some museum or site in Athens. At the open meetings the attendance varied from thirty to fifty, and some six of them were held. Among those who read papers were the Director, Mr. Tubbs, Mr. Loring, Mr. Richards, and Mr. Woodhouse. Several of the papers will appear in the *Journal of Hellenic Studies*.—*Athenæum*, July 12.

ATTIKA.—**EXCAVATION OF THE TUMULI.**—In pursuance of the plan of the general director, Kabbadias, for the systematic excavation of the tumuli of Attika, work has been already completed at the places called Belanideza and Bourba.

BELANIDEZA.—The graves discovered in the mound, here, were enclosed by a *peribolos*-wall. This consisted of rectangular blocks of poros stone set at intervals from each other surrounding the graves and with their in-

terstices filled in with burnt bricks. These bricks seem to have been used only for economy's sake, and were not a later filling in of what were at first entrances through the poros-wall. The *peribolos* was preserved in but a small part of its circuit, because the stones had been put to other uses, but chiefly for covering later graves; and the brick part of the wall, of course, crumbled away when the stones were gone. Besides this *peribolos*, a piece of brick wall was found within the tumulus at several places; it averaged about two metres and a half in height. The greatest height of the tumulus as at present inclosed by the *peribolos*-wall was 3.6 m. at the centre. This was less than its original height, because it had been burrowed into by persons in search of antiquities, but they had not gone deep enough to find anything. The well-known stele of Aristion was originally brought from Belanideza, and possibly may have been erected on this mound, as this was the highest mound in this locality, and was found to contain inscriptions that dated from the same period as that of the Aristion stele.

Nineteen genuine Hellenic graves were found beneath the mound, and above them, and buried in the mound, were six sarcophagi and several urns that certainly belonged to later and Roman times. The Hellenic graves did not appear to have been all made at once as if to receive the dead of some battle, but most probably they belonged to some tribe or phratry. Three graves were situated near the centre of the enclosure, and the other sixteen were disposed in a circle around them. Two of the central graves had a groove at each end, as if to admit a draught of air to assist the burning of the bodies; for, in fact, these graves were quite filled with charred matter. Another peculiarity of these two graves was that, above the natural level of the ground, they had a sort of roof made of rough stones set together after the space between them and the grave and its roof had been filled up with earth. Their construction showed that one of these graves (α) was older than the other (β). Only one contained pottery the other being empty. The large deep (3.3 m.) central grave (η) was peculiar, from the fact that it narrowed abruptly at a depth of 2.3 m.; and, in this lower and narrower part of the grave, the dead had been placed in a wooden coffin. These three tombs seem to have been made before the mound was heaped over them; but the other graves at its circumference could have easily been dug afterward, and thus the pieces of brick wall found in the mound probably served to sustain the earth while these graves were being dug. Three periods could be distinguished in these graves which were later than the mound and placed near its circumference: (1) graves (like η) in which the excavation narrowed quickly at the bottom and the dead lay in wooden coffins; these graves showed *lekkythia* and rough black ware of other sorts; (2) shallower graves with perpendicular sides and with-

out any traces of wooden coffins; these graves contained usually several vases and *lekythia* each; many of which were painted; (3) graves composed of sarcophagi of poros-stone and belonging evidently to the Roman period. The graves of the second period show from their remains that they belong to the fifth century. Buried in the tumulus were found four pieces of stone inscribed with letters belonging to the sixth century, and similar to those of the stele of Aristion. The names of persons inscribed on them show, by their number, that they must belong to the graves of the first period and not to the three earlier graves in the centre of the tumulus.

BOURBA.—The excavations in Bourba have not yet been published; but it may be stated, that similar channels for facilitating the draught of air have been noticed there. Further, in Bourba there was found a brick chamber roofed over and adorned with a cornice; a circular grave walled with rough stone, such as is rarely found in Greece; and an inscribed vase was found still in position and bearing the feet of a statue.

PETREZA.—At the conclusion of work on the tumulus at Petreza, was found, near the centre of the mound, a single grave, on account of which the mound had been raised. A small black-figured vase was found bearing the following inscription of the sixth century B. C.: Μνεσ[κλε]ίδης: ἔδοκεν: φοκι: Κεάλτες: εγραψεν: Around the edges of the tumulus were several other tombs which had been made later.—*Δελτίον*, Jan., March, 1890.

CHALKIS.—**BYZANTINE CHURCH.**—In demolishing the fortress of Chalkis, in Eubœa, part of an ancient Byzantine church has been found, still preserving some good mural paintings of vivid coloring, representing saints. Various architectural fragments and ancient inscriptions were found at the same time worked up in the walls of the fortifications.—*Athenæum*, July 12.

DAPHNION.—In the restoration of the mosaics of the monastic church, the great mosaic picture of the Saviour presents especial difficulties. It is proposed that it should be taken out bit by bit, and, after restoration of the terribly shattered cupola, be put together again.—*Athenæum*, Aug. 23.

DELOS.—M. Reinach refers (*Rev. arch.*, 1890, I, p. 284) to a number of objects discovered in 1889 by MM. Doublet and Legrand at Delos, which are not mentioned in the note on the subject published in vol. v, p. 376, of the JOURNAL.

The investigations were made in the portico of Philip and at several points of the temple of Apollo: the accounts and inventories found are of the year 274 not 275: there are two great decrees of *klerouchia* of about 140 and 130 B. C.; a votive relief to Asklepios; a dedication of the Pisidians to M. Antonius; a signature of the sculptor Hephaiston; and an archaic female statue of life size; two male heads; and numerous terracottas.

ELEUSIS.—Dr. Dörpfeld summarizes in the *Athen. Mittheil.*, XIV, p. 123, the latest excavations at Eleusis. Under the propylæa of Appius Claudius

were the remains of a great tower which protected the access to the sacred enclosure; outside the great propylaia was partly uncovered an immense paved court decorated with two triumphal gates, dedicated by the Greeks to the emperor and the goddesses. Near the eastern door is a great reservoir, doubtless intended for the ablutions of the *mystes*. In the centre of the court are the foundations of the known temple of Artemis Propylaia. s. w. of the great propylaia, Dr. Philios discovered the remains of private houses, decorated with wall-paintings. Certain indications show that the sacred enclosure was enlarged in the fourth century B. C.—*Rev. arch.*, 1890, I, pp. 263-4.

ERETRIA.—The excavations made in the necropolis have been already twice referred to, in vol. V, p. 377, and vol. VI, p. 209. M. Reinach gives a full summary taken from the *Δελτίον* (1889, pp. 74, 83, 98, 115, 136, 150, 155, 171, 173, 213: sepulchral inscriptions in *Δελτίον*, p. 166 *sqq.* The most important objects found during the early part of the excavations and transported to the Central Museum at Athens are the following: (1) woman seated on a rock holding on her knees an open mirror (?) with brilliant coloring; (2) a red-figured *pyxis*, with an obscure inscription, decorated with two groups of two women, one seated, the other standing, with a third walking toward an altar; (3) white *lekythos* with two richly-robed female figures, between which is a stork; above in archaic letters is *Δίφιλος καλὸς Μελανόπο*: another *lekythos* from the same tomb has the same inscription. On others, various scenes are depicted: a warrior; an offering to a stele; a *prothesis*; Charon on his boat with Hermes Psychopompos and a young woman (this painting is said to be a *chef-d'œuvre*); a woman weeping on a tomb; a dead woman, richly dressed, between Hypnos and Thanatos; Athena armed, in a pensive attitude; Odysseus among the sirens; *etc.* Two white *lekythoi* of very remarkable beauty and preservation. The first, 49 cent. high, bears the ordinary subject of the offering to the stele. The second, 40 cent. high, has in the centre, a stele raised on three steps, on one of which is a crowned child holding a wand and raising his hand toward a woman robed in a transparent *chiton* and holding in her right hand one or two javelins; at her feet is a helmet and breastplate: to the right of the child is placed a girl, carrying a basket, who holds her right hand over the child's head: the composition is completed on the right by a bearded man bearing an indistinct object. All these objects have been retained by the Greek Government which paid to the discoverer, B. Nostrakis, an indemnity corresponding to their value.

In a Roman tomb, built of stones cut at a previous period, has been discovered an honorific inscription which mentions the temple of Apollon Daphnephoros at Eretria. The Ephory has confiscated at Eretria a poros relief representing the head of a satyr of natural size, an inscription with

a decree in honor of Arrhidaïos, son of Alexander, and a large number of other inscriptions.—*Revue arch.*, 1890, I, pp. 280-1.

LAKONIKĒ.—A BEE-HIVE TOMB OR THOLOS.—We find in the *Berl. phil. Woch.* (1890, No. 27) a note, taken from the *Ἐφημερίς*, on a new domical tomb found, six hours to the s. w. of Sparta, on the slope of Mt. Taygetos. The *dromos* is 2.65 met. long; the *stomion* is 2.80 met. long, 0.78 wide and 1.16 high. The diameter of the *tholos* is 4.70 met., and the courses are preserved up to a height of 3.75 met. The *stomion* was shut off by a wall. The whole structure is made of small, quite-unhewn stones, and, though strong, without regularity in its courses. The single objects found were trifling. The bones were strewn about, and only the teeth remained of the skulls.

LYKOSOURA.—Amongst the sculptures from the temple of Despoina now removed to Athens, there is a figure resembling the Jupiter of Otricoli in the Vatican Museum, which will prove of great value by throwing light on the relation between the art of Pheidias and that of Damophôn.—*Athenæum*, June 28.

MANTINEIA.—Excavations of the English School conducted by Gardner and Loring at Mantinea have laid bare the foundations of the *scena* of the theatre at a depth of 3 metres.—*Δελτίον*, March, 1890.

MARATHON.—OPENING OF THE TUMULUS.—The success of the investigations at Spata, Bourba, and Belanideza led to the resolution to make new diggings at the tumulus at Marathon, on which Dr. Schliemann was at work in 1884. The name, *Soros*, of this mound, which lies at the distance of a mile or so from the sea, was since antiquity a puzzle. Was it *Σωρός*, that is simply a heap, a wall of earth, or was it *Σορός*, meaning a coffin, a place of burial? Was it a prehistoric tumulus, or the grave of the Athenians who fell in the famous battle (490 B. C.) of which Pausanias says: *Τάφος δὲ ἐν τῷ πεδίῳ Ἀθηναίων ἐστίν, ἐπὶ δὲ αὐτῷ στήλαι τὰ ὀνόματα τῶν ἀποθανόντων κατὰ φυλὰς ἐκάστων ἔχουσιν*? Even before Dr. Schliemann's excavations, an indication which led to various conclusions being formed was the constant finding of heads of obsidian on this obviously artificial mound. Some said these were sure indications of the prehistoric nature of the mound, and led us back to the stone age. On the other hand, Lenormant quoted the passage in Herodotos (VII. 69) mentioning the reed spears of the Ethiopians tipped with heads of hard stone. As the Ethiopians were mentioned among the troops of Xerxes, the French scholar held they might very possibly have been part of the army of Dares and Artaphernes. The excavations of Dr. Schliemann, as they led to the discovery of nothing belonging to the historic period, made people almost certain that the mound was prehistoric, and that it was by no means to be regarded as the grave of

the Athenians. But opinion on this point has altogether changed since the Ephorate of Antiquities determined to reinvestigate the Soros at Marathon.

The hill was originally about twelve metres high, but now, through the accumulations of centuries, the surrounding surface has been raised three metres, so that at present it rises only to a height of nine metres. At this depth (3 met.) below the present surface, there came to light, under the hill, a kind of pavement about 1 centim. thick, and above it a layer of ashes about 2-6 cent. thick. In this layer, besides fragments of wood, are burnt bones and fragments of vases. With the exception of a few other vases, all these fragments of pottery belong to small *lekythoi* of the commonest sort, covered with extremely careless paintings in black figures, such as have been found in great numbers in the excavations of the Akropolis. This hill near Marathon is therefore a general burial-mound produced through the burning and interment of many dead. The vases show this to have taken place at the beginning of the fifth century. There can therefore be no doubt that this was the grave of the Athenians who fell at Marathon.

The excavations have uncovered, thus far, only a small portion of the hill, and were postponed, on account of the heat, until the autumn, when the original form of this monument may be reconstituted.

The *Δελτίον* of this year has (on p. 65 *seqq.*) a protocol of the discovery, and chemical and microscopic reports on the ashes by Mitsopulos.

The results of the excavations are as follows: at a depth of 13 metres from the top of the tumulus the workmen came upon a *hydria* of clay containing bones and ashes, and beneath it was found a layer, 26 metres long and 9 metres broad, full of ashes, charcoal, and human bones, which had suffered from fire and decay. There were also brought to view small vases, and polished *lekythoi*, mostly dark, which were strewn here and there on the soil of the mound. This layer, so far as it had been laid open, was inspected on June 16th by a commission consisting of MM. Kabbadias, Lolling, and Stais, the architect Kawerau, and Prof. Mitsopulos. Their opinion was that we have before us the grave of the 192 Athenians who fell in the battle, and whose bodies were burnt by their fellow citizens. Over them were placed vases, and upon the grave was heaped a mound of earth 13 metres high.

So far for the work of excavation. But the results are by no means purely archaeological. They are of much historical value. It is well known that the story of the fight at Marathon, one of the simplest in history, yet offers great difficulties to the interpreter, and that there are many contradictory theories as to its exact location, as well as that of Marathon itself. A summary of these is given by Lambros.—S. P. LAMBROS, in *Athenaeum*, July 12; DÖRPFELD, in *Athen. Mittheil.*, xv, 2, pp. 233-4.

MEGALOPOLIS.—THEATRE.—This season's excavation at Megalopolis came to an end May 31st. Our new central trench failed to find the *θυμέλη*, but it did find a new line of walls, nearly 20 ft. in advance of the front of the Greek stage: this is the front of the Roman stage. It is of very bad workmanship, but in excellent preservation. Its discovery made it necessary to widen the trench which contained the Greek stage; and now the entire space between the Greek and Roman stages is clear of earth. The line of wall which we have just laid bare is at a considerably lower level than that of the Greek stage; but the Roman stage was supported on columns resting on this wall, and several of the lower drums of these columns remain *in situ*. They are very ugly columns, with a projecting fillet on either side, rather suggesting the notion that the intervening spaces were filled with wooden panels. They are unfluted, but the beginnings of flutings are visible at the bottom of each column, round the front half only; the hinder portion was never intended to be fluted, and is left quite rough. Another discovery is a pair of bases—one just inside each horn of the stone border of the orchestra. One of these supports a higher cylindrical base, which no doubt held a statue, and which is inscribed with the names of the dedicator, *Εἰμαρίδας*, and the sculptor (*Νίκ*)*ιππος* of Megalopolis. The first three letters of the sculptor's name are not absolutely certain. We have also probed high up in the *auditorium*, where there is a broad horizontal line which we have always taken for a *διάζωμα*. Here we found nothing *in situ*, but we turned out many blocks of stone, several being seats, one big block perhaps coming from the back of the *διάζωμα*, and another being probably, but not certainly, a step. We were anxious to find traces of steps at this point, for with ten *κλίμακες* below the *διάζωμα* there would probably be nineteen above, and one of these would be exactly in the centre, where we dug our trench.—W. LORING, in *Athenæum*, June 21.

THEATRE: SUMMARY DESCRIPTION.—The accumulation of earth over the general level of the orchestra has been as much as from 10 to 12 ft., so that it has been impossible to completely clear the whole area of the orchestra and stage in this short period. The results show us a theatre—the largest in Greece—with an orchestra about 100 ft. in diameter. The *auditorium* is slightly more than a semicircle, about 7 or 8 ft. on each side, and the line of the arc is continued around beyond the semicircle, as at Epidauros, and not run in straight toward the stage, as at Athens. The face of the Greek stage is about 30 ft. in front of the ends of the seats so that there is hardly room for a complete circular orchestra, as at Epidauros. The *auditorium* has nine subdivisions, with stairways between each, and one at each end. These stairs are 2 ft. 6 ins. wide, and rise two steps to each tier. The lowest row of seats takes the form of continuous benches, with seats 16 ins. wide, arms at each end next the stairs, and slightly sloping backs,

1 ft. 9 ins high. They are solid and cut out of large blocks of stone from 4 to 5 ft. long. Each bench is 16 ft. 6 ins. long, and formed of three or four stones in length. The front of the lower part of these, under the seat, is cut back to allow of room for the feet. They stand on a level with the orchestra, and are divided from it by the gutter, which is built of stone blocks, is 1 ft. 8 ins. wide by about one ft. deep, and falls toward the west. The space between benches and gutter, a foot wide, is very narrow, hardly enough to let one person pass another. Round the orchestra-side of the gutter is a stone kerb, presumably level with the floor; nothing remains to show what was the covering of this floor; it was probably merely beaten earth, as at Epidauros. No traces have been found of a base stone to receive the central altar, although a trench was dug especially to search for this.

Behind the front benches runs a passageway 3 ft. wide, entered from each end. This must have been the only approach to the lower seats, as the gutter is not bridged at the foot of each stairway, as we find it in the Athenian theatre, to allow the people to pass in and out through the orchestra. The seats behind are merely plain stones, 12 ins. wide, and about 15 ins. high, slightly hollowed in front, and standing up about 4 ins. from the footways, which are 18 ins. wide. The footways and seats are not cut out of one stone, as at Athens, but are separate pieces.

As the one passage and the narrow stairs seem not to provide a sufficient access to the whole of the upper part of the theatre, it is possible that there may have been end staircases; the existence of the double retaining-walls some distance apart seems to supply a place for these, but this problem needs working out by further excavation. These double retaining-walls commence only about 50 or 60 feet back from the front of the *auditorium*, and the single wall, which serves on each side as far as that point, is finished with a broad raking coping.—*Builder*, June 14.

THE STAGE IN THE GREEK THEATRE.—Now that excavation is stopped for the summer it is possible to give an indication of our results. As to the stoa to the north of the river, the sepulchral mound, the altars, *etc.*, there is little to add to what has been already reported. But the importance of our discoveries in the theatre can be better appreciated now that the plan is fairly clear. The plan of the theatre, its front benches inscribed with the names of Arcadian tribes, its water-channel, and other arrangements, have been described in previous reports; but the evidence as to the existence of a stage and its relation to the orchestra is what will be looked for with most interest. A publication with plans and sections will not be made until some doubtful points of detail have been ascertained by further digging; meanwhile, a brief statement of our very important results will not be premature. I make this statement on the authority of the plans and measurements of Mr. Loring, who superintended the work.

The controversy as to the existence of a raised stage in the fifth and fourth centuries has been very vigorous recently; and Dr. Dörpfeld's review of Mr. Haigh's *Attic Theatre*, with the other discussions in the *Classical Review*, has given it a new impetus. It will be remembered that, in various theatres with remains of the stage-buildings of Greek period, there has been found facing the orchestra a row of columns which have their bases on a level with the orchestra, and are with their entablature ten to fourteen feet in height. This, or some trace of it, has been found at Epidauros, at Oropos, at Athens, at the Peiraieus, at the theatre in the Valley of the Muses. The question arose, whether the actors had their place on the level of the orchestra, with these columns as a background, or on a stage supported by the columns, and widely separated from the chorus in the orchestra. It must, however, be observed that this row of columns in no case goes back to the fourth century. At Athens, the stage-buildings of Lykourgos consisted only of an oblong block with projecting wings, between which a temporary stage could be erected—the row of columns was much later. At Epidauros, Dr. Kawerau, who speaks with authority, says that the column-front was a later addition, the original fourth-century structure being a mere oblong building, in front of which a temporary stage could be erected. At Oropos, the proscenium with columns is proved by the inscription not to be much earlier than Roman times, nor can the other two instances claim any higher antiquity.

As to the stage, then, as distinguished from the oblong building that formed its background, we had no evidence of good period before the excavations at Megalopolis. Now, at Megalopolis, we have a stage almost certainly contemporary with the building of the theatre. It consists of a back wall with three doors about 6 ft. above the level of the orchestra, and a thick parallel wall in front, which formed the front of the stage, probably made, like the orchestra, of levelled and beaten earth. Probably the stage was about 5 ft. above the level of the orchestra; and along its whole front and sides is a flight of steps descending to that level, thus affording easy communication between actors and chorus. The stage was 20 ft. broad. Here we have, for the first time, a fourth-century stage, probably similar to those on which the great works of the Attic drama were first acted. In Hellenistic times, the high narrow stage of Vitruvius, supported on columns, may have become usual. At Megalopolis there is also a Roman stage supported on columns, but quite separate from the Greek one.

A stage such as has been found at Megalopolis is a natural development from the cart or table on which the primitive actor mounted to make himself visible and audible above the chorus. Such stages were usually temporary and made of wood, but by a fortunate accident that at Megalopolis was of stone, and so survives to show what its predecessors were like. The

controversy is thus restricted to the use of the stage-buildings constructed in later Greek times, and so is of little importance for the drama in the fifth and fourth centuries.—ERNEST GARDNER, in *Athenæum*, Aug. 2.

EDICT OF DIOCLETIAN.—An inscription, some 250 lines in length, which was found in the possession of one of the villagers, and copied by both Mr. Kastroménos and myself, proves to be part of the famous Edict of Diocletian, fixing maximum prices throughout the empire. More than half of the fragment of Megalopolis is new. The new portions fall for the most part under the following headings: [Περὶ] τῶν μισθῶν τῆς βεκτοῦ[ρ]ης (fares), Περὶ χόρτον (fodder), Περὶ πλούμων (feathers of various birds), Περὶ καλάμων καὶ μελανίου (pens and ink), Περὶ ἐσθήτος (clothing), [Περὶ ἐρέας] (wool), Περὶ λίνου (linen). Besides these portions, many obscure or fragmentary lines in Lebas and Waddington (1870) and the *Corpus Inscriptionum Latinarum* (1873)—in which all the fragments, Greek and Latin, up to date of publication, are pieced together—will be cleared up or restored by the new fragment, which we hope to publish in the next number of the *Journal of Hellenic Studies*.—W. LORING, in *Athenæum*, Aug. 23.

MYKENAI.—Dr. Dörpfeld notes some of Dr. Tsountas' more recent discoveries on the akropolis at Tiryns. The freeing of the southernmost walls of the citadel gave nothing of architectural interest. But on the s. w. a deep rocky way was found which was apparently connected with the water-supply of the citadel. On the very summit, through damage to a portion of the foundation of the Greek temple, a hitherto-unknown part of the vestibule to the Megaron was uncovered. The walls of the royal house are here in excellent preservation, and are formed of quarried stone joined with clay and a few courses of stone slabs. In one corner of the vestibule, the wall-facing with its painting is still preserved, and we recognize here the same stripes, with diagonal lines of different widths, that occur several times at Tiryns, e. g., on the piece of wall-facing with the well-known bull.—*Athen. Mittheil.*, xv, 2, pp. 232-3.

PARAMYTHIA=PHOTIKE.—At Paramythia, in Epeiros, has been found a Latin inscription in honor of Sextus Pompeius which shows that to be the site (hitherto uncertain) of the city of Photiké.—*Athenæum*, June 28.

PEIRAIÆUS.—Amongst the sepulchral stelai, bearing inscriptions and sculptures in relief, recently found at the Peiræus, is one inscribed to a certain Secunda Servilia, daughter of Publius, married to an Athenian. The deceased is represented seated and clothed in the *chiton poderes* and *himation*, and before her stands a little girl holding in her left hand a box closed, and in her right a fan, she also being clothed with the *chiton poderes*, over which is the *epiblema*.—*Athenæum*, June 14.

SLAVOCHORI.—PREHISTORIC TOMBS.—Between Slavochori and the hill of Haghia Kiriaki, where it was supposed that the temple of the Amyklæian

Apollon was placed, a little south of the hamlet of Godena, Dr. Tsountas has discovered two tombs supposed to be of the same period as the neighboring one of Vaphio. It is true that they are not domical but are dug in the rock, like those explored at Nauplia and Mykenai. They appear to be intact and will be carefully explored.—*Revue arch.*, 1890, 1, p. 273. Cf. vol. v, p. 379.

TROEZEN.—In the tombs which were opened here last year by Ephor Staïs, there were found some vases of Mykenaiian style, and a curious gold band with geometric decoration, a bird and a *crux gammata* (Δελτίον, 1889, p. 164). The same exploration brought to light a fragment of an archaic relief on which a nude female is seen seated on a horse.—*Revue arch.*, 1890, 1, p. 275.

The French School are excavating in the Eparchy of Troezen, and report the discovery of the remains of an ancient temple and of some sculptures.—*Athenæum*, June 28.

VAPHIO.—**DESCRIPTION OF THE GOLD CUPS.**—It may be well to give here a brief description of the scenes in *repoussé* on the gold cups so often mentioned (cf. vol. v, pp. 381, 494). They are drinking-cups with handles. In each cup an interior plate or lining, bent over the edge of the outer beaten plate, makes the inside of the cup plain and smooth. On the first cup (height, 0.083 m.; diameter at the top, 0.098 to 0.104 m.; weight, 276 grammes) are represented three bulls: the one at the right is running rapidly toward the right (*i. e.*, the handle of the cup); the middle one is caught in a strong net and overturned (the ends of the net are fastened to trees which may be olives; the other two trees on the cup appear to be palms); the third bull is rushing violently toward the left (*i. e.*, the handle); he is in the act of tossing a man upon his horns, and another man is falling upon his back by the side of the bull. This represents the active fight. The second cup gives the peaceful scenes that follow man's supremacy. Its height is 0.08 m., upper diameter 0.104 m., weight 280.5 grammes. Four bulls appear: the first, at the left, with head raised and open mouth is walking toward the left; about his left-hind foot is a stout rope held by a man who follows; behind the man are two bulls standing peacefully together, apparently in interested conference, the face of one is being turned toward the spectator *en face*; from the right, a fourth bull, with his head down, walks quietly up. Two trees, the species of which cannot be determined, appear behind the first and before the fourth bull. On both cups the uneven ground is indicated, and above the figures appear uneven masses which may represent clouds or other background. The first cup has, besides, a plain rim or frame above and below the representation. There are some faults in the drawing of the figures, but they are lively and characteristic. The men are slender and angular in shape, but muscular. They have long

hair and wear nothing but a heavy belt that sustains on either side a small apron-like projection. Their feet are shod with boots slightly raised at the points and rising with sandal-like strips to the middle of the calf. These cups excel all known works of the Mykenaian epoch.

ITALY.

PREHISTORIC AND CLASSIC ANTIQUITIES.

SYNCHRONISM OF THE TERREMARE AND THE MYKENAIAN TOMBS.—The researches of Unset have proved, that the inhabitants of the *terremare* were acquainted with the use of the *fibula* (*Bull. palet. ital.*, 1883; *Zeit. f. Ethnol.*, 1889, art. *Zu den ältesten Fibeltypen*). It is an interesting fact that Tsountas has discovered, in two archaic tombs at Mykenai, two *fibulae* of a type identical with these of the *terremare*. This would lead to the identity in period of the two civilizations, at a date corresponding about to the XII century.—ORSI, in *Bull. Palet. Ital.*, 1890, p. 20.

ANVERSA (Paeligni).—**NECROPOLIS.**—In working at the road leading from Sulmona to Scanno on the territory of Anversa, above Fonte Palacchio, a series of tombs with sand-crypts have been discovered. The several points at which they exist proves this to be a necropolis of considerable importance.—*Not. d. Scavi*, pp. 129-30.

AREZZO=ARRETIVM.—**A NEW MANUFACTORY OF BLACK AND RED WARE.**—In ancient times, Arretium was a great centre for the manufacture of ceramics, and their vestiges remain within and without the city. A further proof of this has been given by a discovery made about one kilometre outside the Porta Fiorentina, at a spot called *Orciolaia*, a name that is very apt, and must have come down from Roman times.

Near the Porta Fori is the famous manufactory of *Marcus Perennius* (*Not. d. Scavi*, 1883, 1885), in which were made the most delicate and artistic pieces of ceramics in the coral-like red ware that became fashionable after the fall of the black ware, and which is generally termed *Aretime* ware because the potters of Arretium were the foremost in making it. Outside the Porta San Lorentino was the manufactory of *Lucius Calidius*, a contemporary of Perennius. On this same road, beyond the Ponte del Castro, are the fields of the *Orciolaia*, where the ceramic industry flourished with especial activity. Near the bridge was found a vase with the name of *Lucii Titii Thyrsis*, who had a potter's establishment w. of the city at Fonte Pozzuolo. In this neighborhood was excavated a building of quadrangular shape, with which was connected an open square with hard-beaten flooring for working at pottery in the open air. The water-conduit, the place for refuse pottery, and other details were discovered. In the refuse there were two strata, an upper one of red ware, and a lower one of black ware, showing how one fashion displaced the other, while the estab-

ishment continued to flourish. Among the many fragments discovered, the majority showed marks, monograms, initials, parts of words, that stood as distinctive marks or names of individual potters. Some were common to both the black and the red ware. For example, the potter *Dassius* produced both kinds. This manufactory therefore stands at a time of transition from one style to the other, during the close of the second and the first part of the first century B. C.

The artists' names recorded are sufficient proof that they were Greeks: ANTIOCHUS, CHARITO, CHATINUS, DASSIUS, HEC(*tor*), HILAS, LUS(*ias*), NICEPHOR(*us*), PAMPHILUS, STEPANUS, TRUPHO. These men worked together and signed their works without adding the name of any master or owner: this means that they formed a society or *sodalitium* on their own account—a coöperative establishment. They were Greeks, but must have come from a Greek land where Latin script was used, *e. g.*, Campania. This fact is an indication that the industry was not one peculiar to Arretium, but was imported. This is rendered probable by the very few examples of black Etruscan ware found here (and these probably imported from Chiusi), and by the fact that Arretium imported Etrusco-Campanian ware, and became, early in the third century B. C., the seat of several manufactories of such ware. The industry, having thus been imported from Campania into Arretium, was fed by the constant arrival of Greek artisans.

It is interesting to discuss the question of the exact time when the bright coral-red ware with decoration in relief succeeded the black ware. There are but two methods of proof: one palæographic, the other, the earliest use of red ware in Arretium. From the manner in which the names ANTIOCHUS, NICEPHOR(*us*) are written, we recognize that black vases were still made after 640 U. C., because, before this date, the *ch* and *ph* were not used. On the other hand, there is abundant proof that the red ware was in use before Sulla, *i. e.*, before 670 U. C. This gives the years at the close of the second and the beginning of the first century for the beginning of the red ware.—G. F. GAMURRINI, in *Not. d. Scavi*, 1890, pp. 63–72.

BOLOGNA=FELSINA.—ITALIC TOMBS.—Four Italic tombs have been casually found outside the *Porta S. Isaia* in what was formerly the De Luca property. Under the last were objects belonging to a fifth tomb, containing a fictile ossuary of the Villanova type decorated with scratched meanders and pressed concentric circles. It contained a *fibula* of serpentine shape and peculiarly delicate decoration. Its two arches are joined by fine bands and strings of silver, which form an open-work of sinuous lines. There were numerous objects in bronze, and fragments of a fictile vase apparently in the extraordinary shape of a bull surmounted by a duck.—*Not. d. Scavi*, 1890, pp. 104–6.

BREMBATE-SOTTO.—PRE-ROMAN NECROPOLIS.—In vol. v, p. 109, was given an account of the discovery of a pre-Roman cemetery at Brembate-Sotto, between Osio and Trezze, belonging to the first iron-age. Since then, systematic excavations have been undertaken, the results of which are reported by Sig. G. Mantovani in the *Notizie degli Scavi*, 1890, pp. 52–63, 96–103. The contents of fourteen tombs, consisting of 235 objects or groups, are described. Most of them are of the ordinary style, and call for no comment. Among the bronzes are a large *situla* of beaten bronze-plate, used as a cinerary urn; another vase of similar workmanship; an *olpe*, like some discovered in the excavations of the Certosa (Bologna).

In *Tomb XI* was a magnificent oinochoë made of heavy bronze-plate: it is decorated with a graceful palmette from which spring two serpents, as on similar objects from the Certosa (ZANNONI, t. CXXXX, 12) and Marzabotto (GOZZADINI, *Marzabotto*, t. xv, 5; xvi, 2, 4). In *Tomb XII* was a small serpent of cast bronze, probably the *genius loci*. This tomb is rich in interesting pieces: a *situla* of plates of bronze nailed together; two decorative wheels; seven circular pendants with a little silver *olpe* attached decorated with light horizontal lines in relief; a large number of other pendants of similar character, of rings, buttons, gold strings and little plates; an elegant brass *kyathos* with linear decoration in *graffito*. It is interesting to note that the cinerary *situla* of *Tomb XIV* still contained the cloth enveloping the burnt bones and sepulchral furniture.

COLONNA.—ROMAN SCULPTURES.—In his property east of Colonna, Sig. E. Ciuffa has brought to light a number of marble sculptures. The most interesting are: (1) statuette of a bearded satyr, his head covered with a tiger-skin; (2) a hermaphrodite, under life-size, headless and draped in the upper part; (3) head of Venus; (4) archaic head of Apollo, of good work; (5) head of Bacchus, larger than life; (6) two iconic heads, male and female, etc.—*Not. d. Scavi*, 1890, p. 89.

CORNETO=TARQUINII.—NEW DISCOVERIES IN THE NECROPOLIS.—Excavations were again begun, February 10, on the site referred to on p. 222 of this volume. They were carried from a point 100 met. from the *tomba delle bighe* up to this tomb itself. The first one opened was a chamber-tomb (*a camera*), despoiled and with roof broken in: in it was found nothing but a carnelian scarab on which was the figure of a nude warrior (probably Kapaneus) ascending with torch and shield. At a distance of 10 met. was a trench-tomb (*a fossa*), covered with a slab, containing an unburned skeleton, seven pieces of Greek ware with dark bands on light ground, two cups of black *bucchero* with horizontal handles, and two gold pendants. 15 met. west of this tomb was a chamber-tomb with a herring-bone vault (*a schiena*), measuring 2.05 × 1.95 × 2. metres, already despoiled. Among scattered bones were found eight pieces of Greek ware and one hand-made

cup resembling those from the *well* and *trench* tombs. Of the pieces of Greek ware the most interesting is a pitcher whose decoration of brownish-red on a yellowish-white ground consists of triangles, narrow zones, and a broad zone on which are depicted four fish.

Feb. 12. Some trial trenches were dug on the Monterozzi plateau, about 50 met. west of the *tomba del Barone*. A chamber-tomb was found, with vault broken in and anciently despoiled. Among the *débris* were fragments of a black-figured *amphora*, a scarab with a man adoring a lion or a panther placed on an altar, *etc.* From this date up to Feb. 21, four tombs were uncovered, one a trench, the others chambers. The trench-tomb contained an Attic *amphora* of very severe red-figured style, with twisted handles. On one side are an *ephebos* and a boy talking and gesticulating. On the other is a second *ephebos* wrapped in a mantle and leaning his right arm-pit on a staff, speaking with right arm extended. This is the first Attic vase found in a trench-tomb, and shows it to be among the latest of its kind. A mirror found here presents a style of *graffito* earlier than those of the Etruscan necropoli.—*Not. d. Scavi*, 1890, pp. 74-7.

FIRENZE=FLORENTIA.—Many minor discoveries of no moment have been made, but among these an epigraphic discovery stands out as of peculiar importance for the history of the city. It reads: GENIO COLONIAE | FLORENTIAE | . . . T . DIVS | . . . CVS |. This is a confirmation of the fact that Florentia was a Roman colony. Up to the present, there had been but one piece of epigraphic evidence (*CIL*, XI, 1617) which names a COLON(us) ADLECT(us) D(ecreto) D(ecurionum) FLORENT(inorum). The present inscription is in fine and clear characters of the first or second century.—*Not. d. Scavi*, pp. 108-10.

FONTANELLA DI CASTELROMANO (Prov. of Mantova).—Signor Giacomo Locatelli has carried on excavations here with funds supplied by the Ministry of Public Instruction. He writes to the *Bull. di Palet. Ital.* (1890, pp. 50-1): "In my excavations in the territory of Fontanella, I discovered two distinct necropoli: the first and earliest is indicative of the *eneolithic* period, to which belong the tombs of Cantalupo and Sgurgola in the Roman province, the second belongs to the period of transition from the bronze age to the first iron age, and reminds more especially of the necropolis of Bismantova. In the first necropolis, which is for inhumation, I found seven well-preserved human skeletons with accompanying furniture; in several tombs, on the other hand, the skeletons were consumed, but the furniture was preserved. It consisted of superb poniards, various flint arrow-heads and ax-heads, a coultter of stone, and a pin of copper or bronze, 4 cent. long. The skeletons were lying on their left side, with legs curled up, turned to the east, the head to the west; in one case the legs were contracted up to the breast.

"Among other bronze objects found in the second necropolis are to be noted arched fibulae, of the Bismantovan type, hairpins, razors, knives; also bones with decoration and earthen urns of various forms, some with delicately incised designs. A special tomb was also found with an earthen urn *a cordoni* lying with its mouth to the N. and its perforated bottom to the S.; against the whole was a cylindrical terracotta vase also with a decoration *a cordoni*, c, 25 cent. long, and on the E. side was a human skull and a rude earthen glass."

NAPOLI.—In the area of the same ancient cemetery which yielded, a few months before, the inscription of C. Eclanius Fortunatus (*Not. d. Seavi*, 1889, p. 404), an important inscription was discovered on Jan. 2, made in honor of P. PLOTIUS FAUSTINUS SCRIBA PUBLICUS NEAPOLITAN(orum) AEDILICIUS. It is in both Greek and Latin, as are other Neapolitan inscriptions (*CIL*, x, 1481, 1489, 1490, 1494, 1497, 1504), and contains, in the Greek portion, the decree of the Neapolitan senate regarding the honors to be rendered to the deceased. The text will be published in one of the next numbers of the *Monumenti* of the *R. Accademia dei Lincei*.

PARMA.—**THE PALAFITTA OF THE TERRAMARA.**—The *palafitta* of the *terramara* within the city of Parma was discovered, excavated, and illustrated in 1864. It is notable for being constituted of two strata of piles, so as to form two *palafitte*, one above the other. The objects found were of stone, bone, wood, and clay: none were of bronze. During the past winter, in demolishing the bastion of San Benedetto, the workmen found in the earth two bronze objects, a lance-head, and a common knife-poniard. These are objects often found in the *terremare*, and lead to the conclusions, that the *palafitta* of Parma (1) extended twice as far to the N. as was supposed, and (2) contained bronze objects.—*Bull. Palet. Ital.*, 1890, p. 53.

POMPEII.—**DISCOVERY OF WALL-PAINTINGS.**—Some mural paintings or more than ordinary interest have recently been disclosed. In *Reg. VIII*, between Nos. 16 and 21 of *Insula 2*, *Via III* and *IV*, the remarkable discovery has been made of a house five stories high. The upper floor, which is entered from the higher level formed by a mound of prehistoric lava, is profusely decorated, and the principal hall displays on one wall the myth of Bellerophon, a nude figure who, holding with one hand the bridle of his horse, is in the act of receiving the letter and orders of King Proitos, who is seated on a throne before him. The lower part of the house, looking toward Stabiae and the sea, was used as a bathing establishment. Three steps lead into the *frigidarium*, which is perfect, the lower part of the surrounding walls being painted blue, and the upper red. The middle of the right wall is occupied by a picture representing a nymph, semi-nude, borne over the waves on a sea-horse. The horizontal band dividing the blue from the red surface is a kind of frieze of comic or caricature scenes, represent-

ing dwarfs and pigmies fighting with various animals in scenery evidently of the Nile country. One dwarf is in the act of throwing a large stone at an ibis; while another is trying to save, by drawing to the land, a figure (probably a woman) fallen into the river, when, seized himself by a crocodile, he has tied himself with a rope to another dwarf, standing behind, who is striving with might and main to prevent his comrade from being drawn down into the water.—*Athenæum*, July 12.

POZZUOLI.—ROMAN BATH.—Some buildings uncovered here near the Villa di Cicerone belong to a Roman bath. The interior of one of the halls was decorated with columns; two rooms were decorated with frescoes representing figured compositions, scenes of *genre* and still life with birds and fruits, landscapes, and sea-views. Underneath these rooms are others, all covered with tunnel-vaults.—*Not. d. Scavi*, 1890, pp. 122-4.

REGGIO=RHEGION (Calabria).—**PRIMITIVE CERAMICS.**—Certain work in the port of *Reggio di Calabria* brought to light some primitive ceramic objects which are, without doubt, anterior to the foundation of the Chalkidian colony in the VIII century B. C. Nothing is known of the archæologic stratum in which they were found, and the greater part of them have been destroyed. Paolo Orsi describes the few that have been preserved in the local museum. They are all of black ware, some ruder than others. The earliest are of extremely primitive workmanship: the later vases are similar in form and technique to corresponding ones found in the *terremare* but are smaller and more elegant. They are up to the present the only record of a pre-Hellenic settlement at Rhegion.—*Bull. Palet. Ital.*, 1890, pp. 48-9.

ROMA.—THE COLLEGE OF HARUSPICES OR SOOTHSAYERS.—The Etruscan science of divination was represented especially by the *haruspices*, who resided at first entirely in Etruria and did not come to Rome until quite late. They formed a part of the civil rather than the religious administration. In many places they were organized into a club or *collegium* with a president. Such a society was known to have existed in Rome, and was thought (from a passage in Tacitus) to have been organized by the Emperor Claudius, and, arguing from several inscriptions, to have been composed of sixty members. An inscription recently found near the Via Salaria, cut on a *cippus* of travertine in letters characteristic of the close of the Republic or the first decades of the Empire, shows conclusively that already, before the time of Claudius, the *haruspices* of Rome formed an order with sixty members, and that this Emperor therefore merely reorganized, on a new basis and under the supervision of the *pontifices*, this ancient science of divination. The inscription reads: L·VINVLEIVS·L·F·|POM·LVCVL·LVS|ARISPEX|EX SEXAGINTA. It comes from the early Salarian

necropolis so often mentioned during the last four years.—*Bull. Comm. arch.*, 1890, pp. 140–43.

THE LIMITS OF THE FOURTEEN REGIONS OF AUGUSTUS.—In view of the constant disputes regarding the limits of the fourteen regions of Augustus, Professor R. Lanciani has undertaken to determine their boundaries with greater precision than has yet been done. His study is published in the *Bull. Comm. arch.* for May (1889, pp. 115–37), and is accompanied by a diagram and a map. He starts from the hypothesis, that Augustus made a conventional division, following a cardinal line almost due north and south, along the Via Flaminia, surrounding the east base of the Capitol, the west base of the Palatine, and taking the line of the Via Appia. One of the characteristics of this division was the attempt to make it of equal parts, each region containing originally a perimeter of somewhat under or over twelve thousand feet, except the sixth which was made larger on account of its sparse population. The average number of blocks or *insulae* assigned to each was three thousand. The division was determined by two main elements: the Servian Wall, and the main streets leading from the centre to the gates and following to the bottom of the valleys between the hills. A detailed examination is made of the catalogues more recent than the time of Augustus, and then follows a discussion of the exact confines of each region.

TERRACOTTAS.—The excavations in the Campo Verano have brought to light further pieces of terracotta reliefs. (1) Three fragments of a frieze with sacrificing Victories, of severe style. (2) Fragment with the figure of a hunter carrying a lance and accompanied by a dog. (3) Five other fragments with figures of *hierodulae* dancing around an idol of Minerva.

In working at the drain near San Crisogono was found a fragment of a frieze entirely different in style from the above: it is modelled with the stick, in very high relief and in magnificent style. There remains a figure of a man, headless and partly armless and legless, of a Seilenos type, in lively motion.—*Bull. Comm. arch.*, 1890, pp. 148–9.

A HERM OF HERCULES.—The construction of a drain on the old street of Porta Salaria brought to light an interesting piece of sculpture. It is a marble herm of Hercules, slightly under life-size. The lower half of the figure ends in a diminishing shaft whose feet are broken off. Above, the god is entirely covered, with the exception of his head, by the lion-skin arranged in a few stiff folds, with the legs hanging down the left side: the right hand, enveloped in the skin, is placed on the breast; the left, also covered, holds the *clavus*. The head is bearded and of the Lysippian type. There are traces of color on the lion-skin.—*Bull. Comm. arch.*, 1890, p. 148.

SCULPTURES ON THE VIA CAVOUR.—Among the pieces of sculpture found in lengthening the Via Cavour are: (1) a marble bracket formed by a head

of Medusa of the pathetic Hellenistic type with dishevelled hair and half-closed eyes; (2) a half-head of a child, life-size, belonging to the third century A. D. and of excellent workmanship, representing an Egyptian.—*Bull. Comm. arch.*, 1890, pp. 181–2.

NUMISMATIC DISCOVERIES AT AND NEAR THE CITY.—Several numismatic discoveries have taken place in and near the city. On the Esquiline, toward the Suburra some six thousand common bronze coins of the fourth century were found in a brass vase. At **PORTO D'ANZIO** there came to light two libral *As* with the head of Apollo repeated on both sides and belonging to the series assigned by P. Garrucci to the Sabines (t. xxxiv). At **CIVITA CASTELLANA** in a tomb at a depth of twenty metres there was found, by the side of two bronze statuettes, a fine example of the triens of the very rare series of the *aes grave* of Tarquinii (GARRUCCI, t. xlvi, 3). Among individual finds in **ROME** is an inedited new gold quinarius of Probus, medals of Constantine and Alexander Severus, a fine large bronze of Emilianus and one of Antinous.—*Riv. Ital. Numis.*, 1890, pp. 317–18.

TERMINAL CIPPI OF THE TIBER.—On the right bank of the Tiber (Prati di Castello), in front of the Antaldi and Menotti houses there has come to light a notable series of ancient travertine *cippi* relating to the limits of the river-banks. They are thirteen in number, five without and eight with inscriptions. Of the latter, seven belong to the delimitation made by Augustus in 747 U. C.; and one records that made by Trajan in 101 A. D. They were all found in place over an extent of about a hundred metres: hence the particular importance of the discovery, which enables us to study and recognize for quite a distance along the right bank of the river the details of the work undertaken by Augustus to guard the rights of the State. A plan is given of the position of each one, as well as a detailed description. The inscriptions of Augustus are all worded alike: IMP · CAESAR · DIVI · F | AVGVS TVS | PONTIFEX · MAXIMVS | TRIBVNIC · POTEST · XVII | EX · S · C · TERMINAVIT. The only difference is in the formula giving the distance between the *cippi*, which vary between 15 and 148½ ft.; for example, R · R · PROX · CIPP · PED · XXIV.

There are one or two holes in each *cippus*, and these, together with the leaded clamps found on them as well as in the pavement, show that the *cippi* were joined by iron railing which shut out the space toward the river. Nine other such *cippi* of Augustus were already known, all of 747 U. C., and belonging also to the right bank, nearly all having been found near the castle of S. Angelo. The great differences in the distance between the *cippi* and their irregular lineation are signs of irregularities of the ground and the presence of private buildings that could not be appropriated. A new and interesting fact is, that the direction of the line between each *cippus* and the relative position of the next *cippus* are indicated by the side

on which the distance is inscribed; this being not always on the front but sometimes on the side and even on the back. The linear extension of any tract along the river-banks is therefore indicated only by the inscriptions along the front of the *cippi* to the exclusion of the others.

An attempt is made to verify, by means of the distances marked on these *cippi*, the measurement of 0.2963 met. attributed to the Roman foot; and the result, though partial, is decidedly in favor of this measure. The general conclusions are as follows: (1) the *cippi* are travertine parallelepipeds surmounted by a semicircular cap, and measure $2 \times 2.50 \times 0.70$ metres. (2) They rise 1.10 or 1.20 met. above the surface; and (3) are planted at the corners of the perimeter of the public property in such a way that the apex of each angle of the perimetral line coincides with one of the outer angles of the *cippus*. (4) The placing of the *cippi* followed the course of the river, so that the distance between two *cippi* was always noted on the lower of the two. (5) The inscription giving the date of the limitation is always incised on the side facing the extension of the property limited. (6) On each *cippus*, the distance from the next one is indicated, and the spot on which this is inscribed indicates the direction of the next section of the polygonal line, and consequently determines the position of the next term. (7) The real measure of distance should be calculated on the line of the projection of two consecutive *cippi*.—*Not. d. Scavi*, 1890, pp. 82-8.

SCHIAVONIA.—STELE WITH EUGANEAN INSCRIPTION.—A *cippus* of hard trachyte, found in Schiavonia (part of the commune of Este) and shaped like a truncated pyramid, has upon one of its four faces a zone inscribed with Euganean characters enclosed within incised lines. This pyramidal stele should be numbered among the inscribed stones of the most advanced Euganean culture.—*Not. d. Scavi*, 1890, pp. 51-2.

TIVOLI.—ANCIENT NEOROPOLIS.—Near the Villa d'Este, have recently been found some tombs which prove, for the first time, the existence in this locality, the highest point in Tivoli, of an ancient necropolis. In one of the tombs was a small two-handled Etrusco-Campanian vase with a painting in reddish ocre representing two *epheboi* in the usual style of the third century B. C.—*Not. d. Scavi*, 1890, pp. 122-3.

CHRISTIAN ANTIQUITIES OF ITALY.

THE DATE OF THE RENAISSANCE.—At a meeting of the *Soc. des Antiquaires* (Dec. 18, 1889) M. GUIFFREY called attention to four gold medallions of Italian workmanship, representing Roman Emperors, which are mentioned in the inventory of the jewels of the Duc de Berry, and which he is about to publish. The Prince purchased them in 1402 of merchants from Italy: they now belong to the *Cabinet des Médailles*. M. COURAJOD remarked the importance of the date of the medals, because, at the time of their execu-

tion, Italian art had not yet turned to the study of the antique.—*Ami des Monuments*, 1890, pp. 49–50.

ARCEVIA.—**PAINTING BY LUCA SIGNORELLI.**—Sig. A. Anselmi gives, in the *Archivio storico dell'Arte* (1890, pp. 157–8), a note on an important painting by Luca Signorelli of which all trace had been lost since 1810. Up to that time, it had been preserved in the church of San Francesco at Arcevia, for which place the painter executed a number of works. It was among the works of art seized by the French in 1810 and never returned. It represented the enthroned Virgin holding the Child, and having on one side SS. Simon and Jude, on the other SS. Bonaventura and Francesco. Below was the inscription in gold letters: JACOBI SIMONIS DE PHILIPPINIS AERE | DEO ET B. V. DICATUM | FR. BERNARDINO VIGNATO | GUARDIANO PROCURANTE MDVIII.

FIRENZE.—**TWO PAINTINGS RESTORED TO PIERO POLLAIUOLO.**—In the church of Santa Croce, at Florence, near Donatello's tabernacle with the Annunciation, is a fresco, by a master of the *quattro cento*, representing SS. John and Francis, which has been attributed until now, on the faith of Vasari, to Andrea del Castagno, though quite recently Morelli and Bayet have suggested the name of Domenico Veneziano. An anonymous ms. of the XVI century in the Uffizii gallery entitled *Nota delle tavole di pittura e figure di marmo di eccellenti maestri che sono in Fiorenza*, this work is attributed to Piero Pollaiuolo, with these words: *S. Giovanni B.^{ta} con S. S. Franc.^o in fresco nel muro a man destra della cappella de' Cavalcanti, del Pollajuolo, eccellente maestro, maniera del S. Bastiano de' Pucci nella Nuntiata*. This painting of S. Sebastiano here referred to is attributed to Piero Pollaiuolo by Albertini.

Another painting that should be restored to this master is a male portrait exhibited at the Uffizii as No. 30 under the name Antonio Pollaiuolo. By comparison with a portrait of Galeazzo Maria Sforza copied by Cristofano dell' Altissimo, at the request of Cosimo I, from an original in the Museo Giovo, this painting also is shown to be a portrait of this Milanese duke. Its attribution to Piero Pollaiuolo is then made certain by the inventory of Lorenzo de' Medici published by M. Müntz, which speaks of a *quadro dipintovi la testa del Duca Ghaleazo di mano di Piero del Pollaiuolo*: it is further referred to in the inventory of the Palazzo Vecchio, compiled in 1553, as: *uno ritratto in tavola d'un duca di Milano con ornamento dorato et vesta piena di gigli dorati*.—U. Rossi, in *Arch. stor. dell'Arte*, pp. 160–1.

PRATO.—**FORGOTTEN WORKS BY NICCOLÒ D'AREZZO.**—The sculptor, Niccolò di Piero Lamberti is known to hold an important place as one of the precursors of and earliest coöperators in the Renaissance. His known remaining works are very few, and it is all the more interesting to call attention to two works which by documentary testimony are known to be his.

I. The façade of the cathedral of Prato shown to be his by the *Libri degli Operai* of this church, as published by CESARE GUASTI, *Il Pergamo di Donatello*, p. 12, where we read that, before 1413, *Niccolò di Piero chiamato il Pela di Firenze e i suoi compagni Giovanni di Donato e Lorenzo di Matteo da Fiesole hanno tolto a fare la faccia dinanzi della pieve*. It is to be conjectured that the design of the façade, as well as its execution, was by him.

II. The second work is the sepulchre of Francesco Datini, whose life is given through the correspondence of the Florentine notary Lapo Mazzei, also published by CESARE GUASTI, *Lettere di un notaro a un mercante del secolo XIV*. Here are given the accounts of the sums expended from Jan. 3, 1410, to Aug. 16, 1412 for the monument of Datini, whose reclining figure and the frieze containing the inscription were entrusted to Niccolò. This tomb still remains in front of the high altar in San Francesco. The figure, of good proportions, is surrounded by a Gothic niche.—*Archivio stor. dell'Arte*, 1890, p. 161.

VENEZIA.—FOUR PAINTINGS BY CRIVELLI.—The Gallery in Venice has received four small tempera paintings by Carlo Crivelli, of whom it had previously had but one example. They came from the Pericoli sale in Rome and previously from the D'Aste collection of Genova. They represent the standing figures of Saints Roccus, Sebastianus, Emidius and Bernardinus. These four pieces must have belonged to a polyptych and been placed on either side of a large central composition. In style they belong to the painter's latest period, about 1490. The inscription, *OPVS CAROLVS (sic) CRIVELLI VENETI*, is apparently a bad copy of the original inscription.—*Arch. stor. dell'Arte*, 1890, pp. 158-9.

SARDINIA.

TERRANOVA FAUSANIA.—PREHISTORIC TOMB.—Excavations on this site in the territory of Olbia brought to light a tomb of unusual interest and evidently of great antiquity. It was of very oblong oval shape; the walls were formed of accumulated loose stones arranged with a certain symmetry and not rising to any great height. Three exfoliated rocks, whose interstices were filled with small stones, were laid flat upon the edges of these rough walls, thus closing the tomb. The flooring consisted of roughly arranged stones imbedded in the earth. Within, beside human bones, was a rude vase of blackish ware, made with the lathe, with slightly curving walls, somewhat projecting mouth, and without handle: fragments of other similar vases lay about, also a thin strip of bluish flint with well smoothed surfaces and obliquely cut edges.—*Not. d. Scavi*, 1890, pp. 92-3.

PREHISTORIC CONSTRUCTIONS.—Sig. Tamponi reports in the *Not. d. Scavi* (1890, pp. 130-1) some prehistoric discoveries in the territory of ancient Olbia. In the highest part of the region of *Pedra Zoccada* were remains

of a *giant's tomb* formed of rude masses of granite arranged in two parallel rows ten met. long and sixty cent. apart. The space between the rows formed the sepulchral chamber and was doubtless anciently covered with slabs, as in other cases in Sardinia.

At a short distance, at the highest point of the hill, are traces of a *quadrangular wall* around which were picked up several pieces of obsidian, as well as fragments of pottery of very primitive manufacture. On every part of this summit are to be seen stones belonging to destroyed constructions. Near by is a cavity, formed of two immense blocks of granite, and measuring over 15 sq. met., within which were found fragments of pottery and obsidian, indicating this to be a prehistoric station.

Traces of another prehistoric station exist at *Albitroni*, a picturesque elevation along the rocky chain of *Monte a Teltri*, to the left of the Roman road from *Sbrangatu* to *Traissoli*. There have been found fragments of rude unturned pottery; flakes of obsidian; blocks of granite arranged in a certain order, as in the *nuraghes*.

SICILY.

THE PREHISTORIC ARCHÆOLOGY OF SICILY.—We here give the summary promised in our last number (p. 240) of Signor Orsi's two papers on the early archaeology of Sicily, in the *Bull. di Palet. Italiana*. "Up to the present, the literature of primitive Sicilian archaeology has been exceedingly limited; not only that of the neolithic period, which is really prehistoric, but, even more, that usually attributed to the Siculi, which may be regarded as the transition from the prehistoric to the historic. By the Siculi, we have superb rock-cut necropoli, so imposing as to compare favorably with the most important groups on the mainland; we have megalithic monuments so little known that their existence even is denied by the majority; we have a family of vases which may be yet regarded as entirely new, with certain peculiar forms of geometric painting which establish a direct bond of union between Sicily and the East, at times anterior to the Greek colonization." The only writers who have attempted a study of the subject in any of its parts are Professor Cavallari, who confined himself to the topographic distribution of the necropoli and the type of the tombs; and two Germans, Messrs. Schubring and Holm, who attempted merely an enumeration, often erroneous, of the localities where the necropoli are found. Professor Cavallari is at present engaged upon a large and comprehensive synthetic work which will illustrate the various types of necropoli and their varied contents, with a comparative study of related Italic or extra-Italic monuments.

The great difficulty has been, until now, that the necropoli are empty and long since despoiled and that but few recent discoveries have been

made. Sig. Orsi has given in these papers notes on such discoveries as have come to his attention, by which alone the age and nationality of these necropoli can be determined; and he has added an attempt to interpret the few known elements of Siculan culture.

PANTALICA (*Herbessus?*).—At the junction of the river Anapo and its confluent the Calcinara, in the Monti Crimiti, rises, like an enormous bastion, the tableland of Pantalica, entirely isolated. Its greatest length is 1200 by 400 metres, and its elevation between 390 and 420 metres. The position is impregnable; the only weak point is on the west, where fortifications were erected including a walk constructed of regular parallelo-pipeds. The plateau was occupied by a city, or rather by a very primitive population, perhaps of shepherds, who appear to have lived in large caves and in cabins of cane-work or mud. If this be true, as would seem from the complete absence of traces of masonry, it is a fact of great interest. The conclusion is drawn by Sig. Orsi, that this was an inhabited centre even after the coming of the Greeks and Romans, and that its inhabitants were native Siculi, who, being protected by the inaccessibility of the site, preserved not only a certain independence but the habits and customs of their ancestors and the primitive form of habitation and sepulchre. Certain modifications were, it is true, introduced, such as the adoption of coinage from the Greeks, the use of more elegant vases, and the type of fortification. This fortification, already alluded to, is essentially Greek and has its prototypes in the Eurialean castle at Syracuse and the akropolis at Leontinoi. The former of these is the work of Dionysios I, and dates from 402 to 397 B. C., and this gives us a date for the fortifications of Pantalica. In 404 Dionysios led an expedition against *Herbessus* (Diod. Sic., xiv. 7), where he kept a garrison, and this city has been, wisely in Sig. Orsi's opinion, identified with Pantalica.

The great Siculan necropolis is perhaps unique for its size. It was visited as early as 1555 by Fazello and excited his admiration. It contains perhaps some thousand sepulchral cells, grouped especially around the great N. E. spur. They appear to be of all periods, extending from the earliest pre-Hellenic to the Roman period. The type is of a trapezoidal or quadrangular door or rather window, followed by a very short *dromos* or corridor leading to the sepulchral chamber. The window is framed by several recesses that served to secure the closing slab, which in a few cases is double. In the few hypogeic cells which Sig. Orsi studied near by, the vault is not curved, as in the earliest type, but is flat, and the chamber is quadrangular instead of oval—contrary to the most archaic examples at Syracuse. This form is quite late. Sig. Orsi was not able to find a single unopened tomb.

The museum of Syracuse contains objects from the necropolis of Pantalica. Among these are three small bronzes—two poniard-blades and a decorated fibula—which are a cardinal point for the chronology of Pantalica. The poniards are of a very archaic type used in Italy (*terremare* and *palafitte*), through Central Europe, and in Greece, in the pure bronze age. In the first iron age, this type disappears and is replaced by that of the *lama a fiamma* or concavo-convex blade, of which also an example has been found at Pantalica. The two bronze poniards represent the earliest objects yet found at Pantalica, anterior to the Greeks and perhaps to the Phœnicians: a very moderate *terminus ante quem* would be at latest the XI cent. B. C., for the earliest tombs of Pantalica. This is all the more interesting, that the existence of a real bronze age in Sicily had not yet been satisfactorily proved.

In 1879, an intact tomb was opened and its contents deposited in the museum of Syracuse. It had an elliptical cell and a semicircular vault, thus placing it among the earliest examples. It contained three vases and a bronze knife, the rite being that of inhumation. The knife is of the type transitional from the lanceolated to the concavo-convex form, which was in use at the end of the bronze and the very beginning of the iron age, not only in Italy but in Central Europe, Greece and the East: examples were found at Hissarlik (second stratum) and Mykenai, while those in Kypros are of copper; and they also appear in a slightly more recent stratum at Idalion, and with Phœnician vases in other sites. This tomb, therefore, is at least as early as the most archaic Villanova period, almost contemporary with that of Mykenai and certainly earlier than the first Hellenic colonization.

During the winter of 1889, were carried on clandestine excavations resulting in the finding of fictile and bronze objects partly reproduced on pl. IV of the *Bullettino*. Their character is very primitive. That of the bronzes places them between the X and V cent. B. C., at a date almost coinciding with the arrival of the first Greek colonists (735–729 B. C.). This, therefore, settles approximately a second chronologic point in the history of Pantalica. Only systematic excavations, such as have not yet been conducted, can make any detailed and scientific conclusion possible.

TOMB OF MILOCCA.—South of the great port of Syracuse is a plain defended by a tower of the XVI cent., and from it called the plain of Miloeca. On it is a necropolis formed of a curious type of tomb opened in the rock, and which might be termed a *compans* and belong to the advanced Hellenic period. Here there took place, in 1871, a very important discovery of which hardly any notice was taken. It was that of a circular hypogeic cell in whose right wall was cut a *loculus* which contained six rude vases some of which were ignorantly destroyed. The cell had a circular oven-

roof and was preceded by a little *dromos*. This shape is extremely archaic. The vases are so important as to require special description: they are of two distinct manufactures and origin; the one, rude and of local make; the other, painted and imported. First in importance are two cups, one large, the other small, of calyx shape, of irregularly black earth, turned, the larger one having a high annular handle. The presence of such calix-vases is not fortuitous but is a special characteristic of the Siculan necropoli: Sig. Orsi gives statistics of the types hitherto known, adding others that are inedited. The conclusion is drawn, that the calyx-vases with a body at times globular, at times expanding a *tromba*, either painted with geometric decoration or of rude technique with simple glaze, are a hitherto unnoted characteristic of the artificial sepulchral grottoes of the Siculi, which represent, chronologically, the intermediate stage between the close of the neolithic period and historic times: they are of such uniformity of type as to constitute a peculiarly Siculan type of ceramics. It is a plausible conjecture, that they are imitated from Oriental fictile or metallic vases. Such vases are found among the Mykenaian ceramics, at Mykenai, Hissarlik, Tiryns, and in early Boiotian tombs. In fact, it is proved, by two more of these Milocca vases, that products of the Mykenaian culture, which may have served as models, were imported into the island. These examples are small amphorae: one has three annular handles, is turned, painted a creamy-white, made of a pure pale-yellow clay foreign to Sicily, decorated with lines, bands, undulations, and palmettes in chestnut-brown. Both belong to the third of the four phases of Mykenaian ware established by Furtwängler—that characterized by a colored decoration with brilliant varnish. To this phase belong almost all the vases of Ialysos, Nauplia, Haliki, Spata, and Menidi, and, as with it are at times mingled Dipylon vases, its close must have been preceded by the Doric emigration in the XI century. The date of XI-X cent. must therefore be assigned to the tomb of Milocca.

The situation of this tomb, in the plain instead of being cut in the rock, is another proof of the existence, all around Syracuse, of a circle of Siculan villages whose position is still indicated by tombs. One of the most important of these groups is situated in the Reale property near Scala Greca.

NECROPOLIS ON THE REALE PROPERTY.—Sig. Orsi cleared all the grottoes composing this small necropolis, but without much result in the way of contents, as they had often been despoiled. Architecturally, they are of early shape, being all a variation of circular or oval ground-plans, some being formed of a double cell beside the *dromos*. Twenty of these are described.

SYRACUSE A SICULAN CITY.—The conclusion is reached, that, as the modern Syracuse is surrounded, within a radius of from 3 to 6 kilom., with small archaic necropoli, this city, before being a Greek city (734 B. C.) or a Phœnician station (XI-X cent. B. C.), was a settlement of the Siculi; and that

these necropoli must have been abandoned toward the close of the VIII cent. B. C., through Greek hostility.

NECROPOLIS NEAR NOTO.—In 1886, three tombs were cleared, one of them being of extraordinary size. Among the fragments of pottery were some both of black ware with pressed geometric decoration of concentric circles and bands similar to the Villanova ware, and also fragments of vases with pale background and brown geometric decoration. This favors a synchronism of the two techniques.

SICANI AND SICULI.—After an examination of the texts and other evidence regarding these two related peoples—the Sicani and the Siculi—who succeeded each other on Sicilian soil, Sig. Orsi arrives at the following conclusions. Both are of Italic race and descended from the north: there appears to be no appreciable difference between the monuments which the two peoples have left. Beside the question of race, there is one of archæology. The pre-Hellenic civilization of Sicily is characterized by rock-cut tombs, no tombs dug in the earth having been found belonging to the Siculan period. Did the Siculi bring with them this type of tomb or did they find it already in use in the island, and adopt it? There are no traces whatever of such a type on the mainland; consequently, its origin should be sought in the relations that existed from the earliest times between Sicily, Greece, and the Orient. Tombs of a similar shape and vaulting are found in Krete, Kypros, and other Greek islands, as well as on the mainland. Such are, in Krete, the grottoes of Anoia and Milatos; in Kypros, a number that are illustrated by CESNOLA and OHNEFALSCH-RICHTER (*Cypr. Stud.*, 1889, pl. II). Sig. Orsi concludes: "It is nevertheless impossible to admit ethnic relations between Sicily and Cyprus; but the facts I have adduced are certain proofs that Sicily, alone perhaps of all Italic lands, was touched by the reflexes of that still mysterious pre-Dorian civilization which spread not only over the entire Hellenic continent but into the furthest islands, and which we broadly designate by the un-ethnographic term Pelasgian. Now that the origins of this pre-Dorian culture are traced back to Asia Minor and especially Lykia, my hypothesis is confirmed by the existence, in that region, of necropoli identical with those of the Siculi. In the southwest of Asia a great necropolis of this kind was discovered by BENNDORF (*Reisen im Südw. Kleinasien*, I, p. 45), which had several rows of inaccessible cells open in the rock-face of a high mountain, identical with those of Cava d'Ispica, Pantalica, Palazzolo, etc. Analogous ones exist at Sidyma, Kiöbaschi, and other places in Lykia (*ibid.*) and in the valley of the Argeus (HAMILTON, I, p. 225), which, though but little explored, have great structural affinity with those of the southeast of Sicily. It is not therefore too bold to assert that, in the island, this civilization met with the Italic, but both are too little known to allow of any judgment as to their peculiari-

ties, their diffusion and intensity, and as to the ethnic relation between the primitive population of the island and those which in the East had an analogous culture."

AVOLA=ABOLLA.—NUMISMATIC DISCOVERY.—Three miles s. w. of Syracuse is the present city of Avola, where stood the ancient Ἀβόλλα, *Abolla*, mentioned by Stephanos of Byzantion. In its neighborhood there were found, some two years ago, in two small unpainted vases, 33 gold and about 150 silver coins. The gold coins consisted of 4 Darics, a stater of Abydos, 14 staters of Lampsakos, and 14 Syracusan $\frac{2}{3}$ staters or hundred-litre pieces. Of the silver pieces the majority, as is usual in Sicily, consisted of Pegasos staters, and the greater part of the rest were Corinthian drachmas. A large part of this find is described and illustrated by A. LÖBBECKE in the *Zeitschrift für Numismatik*, 1890, No. 2, pp. 167-79. Its special value consists in the beautiful and in part unknown gold coins.

SELINOUS.—DISCOVERY OF AN ARCHAIC METOPE.—We read in the *Notizie degli Scavi* (1890, p. 130): "The new explorations in Selinous began this year with the best auspices. The uncovering of the western fortifications of the acropolis having been undertaken, there was found among material used in these fortifications a beautiful metope, of tufa from the quarries of Memfi, on which are two figures, that of a woman on the left of the spectator and that of a youth on the right. The latter wears on his head an elegant petasos, which leads to his identification as Hermes. The severe archaic style is yet artistically advanced. This precious piece of sculpture will soon be edited in the coming number of the *Monumenti* published by the *Accademia dei Lincei*."

SPAIN.

GRÆCO-PHENICIAN ARCHAIC SCULPTURE IN SPAIN.—M. Heuzey recently read, before the *Acad. des Inscriptions*, a memoir entitled *L'Archaisme greco-phénicien en Espagne*, in which he studies a question of authenticity which interests the general history of ancient art. In about 1869, an important collection of sculptures was said to have been discovered in the mountains s. w. of Murcia at the place called the "Hill of the Saints." Well known in Spain, where they have been described by some of the most noted archæologists, these sculptures gained but little confidence in France. Notwithstanding that several series of casts were sent to the exhibitions of Vienna and Paris in 1874 and 1878, the barbarous extravagance, the disquieting peculiarity of certain types, led the few archæologists who ventured to speak of them in France and Germany to do so briefly and with great caution. The discovery was thus stifled under a ban, and the monuments remained outside the current of science and history.

M. Heuzey, having examined the original sculptures in Spain, has joined the ranks of those who believe the discovery to be perfectly authentic, at least as a whole. By the aid of the directors of the archaeological museum of Madrid, he was able to place before the Academy casts of the pieces which were not exhibited at the Exposition of 1878. These casts represent: (1) a votive statue of a woman wearing a veil that rests on her shoulders—evident traces of Greek archaism are here joined to more recent characteristics; (2) the head of a female statue, crowned with a high tiara—in this fragment the double Oriental and archaic-Greek character is very pronounced; (3) several heads of male statues whose hair, cut in short locks, according to the style of the good Greek period, is rendered, however, by traditional processes that are entirely Asiatic and even Babylonian.

The general style of these sculptures, beyond certain local eccentricities, is Greek and archaic; but the execution indicates a workshop whose products show an Oriental handiwork. M. Heuzey does not believe that the isolated influence of the Greek colonies could account especially for the curious persistence of Oriental technique in this mixed art. According to him, it would be necessary to admit quite an early action of the archaic-Hellenic style upon Phœnician art, which he calls *l'action en retour de l'archaïsme grec*. This Græco-Phœnician archaism, strongly mingled with Asiatic elements, which became, as it were, the last period of Oriental art, must have continued to flourish (in his opinion) especially at Carthage, and still later even in Carthaginian Spain. Hence it spread through the region of Carthage, perhaps even before the late foundation of the important colony of the same name, in 228 B. C.—Paris *Temps*, April 29.

FRANCE.

JEWISH EPIGRAPHY.—It is well known that, outside of tombstones, Hebrew inscriptions in France dating from the Middle Ages, or even the following period, are extremely rare. M. Schwab has communicated to the *Acad. des Inscriptions* two series of Hebrew inscriptions dating from the first half of the XIV century.

He reported that in the **TOUR BLANCHE**, so named from Blanche of Castile, which is the principal monument of *Issoudun* (Indre), a number of Jews who were imprisoned here traced their names on the walls of their prison with formulas of prayer, doubtless for the purpose of being more easily ransomed. One of these inscriptions bears a Jewish date corresponding to the middle of December 1302. One of them has great paleographic interest on account of the peculiar shape of its letters.

At **SENNEVILLE** (near Mantes) M. Reyboubet succeeded in finding and copying with great difficulty, under the wheel of a mill, two inscriptions belonging to Jewish tombstones, the largest of which dates from the begin-

ning of 1339. The letters, which are remarkable for their size (being 12 cent. high) are said to resemble those of the analogous texts recently discovered at Mantes.—*Paris Temps*, April 29.

PROPOSED MUSEUM FUND.—M. Antonin Proust and a large number of his colleagues belonging to the different parties in the Chamber, among whom are MM. Clemenceau, Lockroy, Reinach, Arène, Maret, Millerand, Deschanel, de Cazenove de Pradine, de Breteuil, baron Reille, have deposited in the bureau of the Chamber a project of law for the organization of a *Caisse des Musées* or Museum Fund, for the purpose of facilitating the acquisition of works of art by the museums of Paris and the Departments. It is proposed that this Fund shall consist annually of the sum of 500,000 francs taken from the general funds of the budget, any excess to be carried forward. The Fund would be administered by a consulting council, presided over by the Minister of Fine Arts.—*Chron. des Arts*, 1890, No. 23.

SESSION OF THE CONGRÈS ARCHÉOLOGIQUE.—The Report of Session LV of the *Congrès archéologique* of France, held at Dax and Bayonne in 1888, has only just appeared (Picard, Paris). The volume is useful for its illustrations, chiefly from photographs, of Roman and Gallo-Roman mosaics and monuments, and of the Romanesque architecture of s. w. France, and the Spanish frontier. Basque subjects are conspicuous by their absence.—*Academy*, Aug. 9.

APT (near).—**PHOKAIAN COINS OF MASSILIA.**—In the neighborhood of Apt, by the side of the Domitian road leading from Arles to Milano, has been found an urn containing 102 silver medals of the early Phokaian period of Massilia=Marseilles. Among them was a conical ivory box containing a bronze ring.—*Ami des Monuments*, 1890, p. 40.

AVIGNON.—**MONUMENT OF CARDINAL LAGRANGE.**—In the Musée Calvet at Avignon is a marble relief representing a dead man with dried and horny skin half-way between a body and a skeleton, a work as admirable as it is horrible. This and a number of statues surrounding it belonged to the mausoleum of Cardinal Jean de Lagrange, Minister of State and Superintendent of Finance of Charles V, who died in 1402. The mausoleum was in course of erection at the time of his death. This most important of all the monuments of Avignon was destroyed in 1751, and its arrangement would not be known were it not for the discovery by M. Eugène Müntz, in the Barberini Library at Rome, among the papers of Suarez, of a drawing of the XVIII century which roughly reproduces the structure of the mausoleum and the principal statues with which it was decorated.—M. EUG. MÜNTZ, in *L'Ami des Monuments*, 1890, pp. 91-5.

BOURGES.—**RESTORATION AND DISCOVERY OF MONUMENTS.**—M. Boeswillwald, the well-known architect, has lately finished several pieces of work undertaken to restore some monuments of Bourges to their original style

and condition. The Hôtel Cujas, which had been badly disfigured, is now reëstablished and is to become the civic museum. It is said that there was found here an important stone-relief of the Massacre of the Innocents, which has been purchased by the museum of the Louvre. A second monument is the *grange dixmière* of the chapter of the cathedral, which long served as military stable and storehouse. It is a good example of the civil architecture of the XVII century.—*Ami des Monuments*, 1890, pp. 21-2.

CHENERAILLES.—GOTHIC TOMB.—A charming plate is published in the *Ami des Monuments* (1890, opp. p. 65) of one of the most interesting French Gothic sepulchral monuments that remain. It had never before been carefully reproduced. The tomb is that of the priest Bartholomeus, and bears the inscription dated from 1300 which reads: HIC · JACET · DOMINVS · | BARTHOLOMEVS · DE · PTALHEA · PRESBITER · | QVI · OBIIT · DIE · FES · T · V · M · (Virginis Mariæ) ANNO · DNI · | M° CCC. The tomb has a frame of oblong shape, enclosing a low, slightly-trefoiled, pointed arch, within which are three rows of reliefs. The upper represents the Crucifixion; the middle, the Virgin and Child, with several subordinate scenes, including the presentation of Bartholomew by his patron saint, Aignan; the lower row represents the burial-scene of the deceased, his bier surrounded by mourners.

PARIS=LUTETIA.—A ROMAN RUBBISH-HEAP.—The hillocks formed by the deposit of rubbish outside the city-walls (frequently of great archæologic interest) often became enclosed within the city-limits by the extension of its fortifications. Many such have been long known in Paris; such are the *monceau Saint-Gervais*, the *butte Saint-Roch*, etc. M. Eugène Toulouze has discovered one, hitherto unsuspected, at the southern end of the *butte Sainte-Geneviève* at the corner of the *rue Gay-Lussac* and the *rue Royer-Collard*. It rose about eight metres above the level of these streets and descended two metres below the level of the *rue Le Goff*. This hillock is a real archæologic museum and dates back as far as the beginning of the Gallo-Roman period, closing its history in the XVII century. The upper stratum, of about 2.40 met., contained fragments belonging to the XVI and XVII centuries. The XIV, XV, and XVI centuries were represented by a blackish deposit, only 70 cent. thick, containing especially some pharmaceutical pottery. The previous two centuries left a deposit of but 45 cent., containing bones and rude pottery for domestic use. The period from the V to the XII cent. left only a mass of gravel 1.30 met. thick. The *Gallo-Roman period* is represented by a stratum varying in thickness from 1.70 to 3 met. which contains a mine of information regarding the domestic ceramics of the pagan inhabitants of Lutetia. From certain facts it appears evident that there were houses at this point during the Gallo-Roman period, and that the *débris* was not brought from a distance. The greatest variety of objects were found: a bronze statuette of Mercury, a bronze lion-head,

coins of Augustus, Trajan, Nerva, Tiberius, Claudius, *etc.*, glass vases, *fibulae*, a bronze *statera* or weighing machine. The pottery is of especial interest. On a number of fragments are given varied designs in relief: hunts, single figures, decorative patterns, *etc.* The plain vases often have an elaborate series of sharply-cut mouldings. *The prehistoric period* is represented by two fragments of axes of grey silex of the neolithic period, found among fragments of pottery apparently of the bronze age. A potter's establishment, also, was discovered, which evidently existed before the site was turned into a rubbish-heap. Near this point, a grave of the Gallo-Roman period was found.

The most important single piece of pottery is one which the discoverer calls *le vase de Lutèce*, and which he considers the earliest and most precious piece of primitive ceramics that has been found in Paris. It is the only piece yet found which antedates the use of the lathe, and it therefore belongs to the bronze age.—*Revue arch.*, 1890, I, pp. 351-77.

LOUVRE.—*Acquisitions.*—*Egyptian Collection.*—The Department of Egyptian Antiquities has made some important purchases at the sale of the Sabatier collection. The following are especially worthy of mention: (1) magnificent Amon of the time of the Ramessidae, corresponding in material and art to the royal colossi of Luxor; (2) crouching statue of Nesshutaftnut, prophet of Sekhet, dedicated to Tum and Osiris of Thebes; (3) the coffin of the priest Bes-n-Mout, with a magnificent head in black wood; (4) fine bust from a male statue, of the Saïtic period; (5) female head in gilt lapis, with white and black incrustations in the eyes; (6) polychromatic terracotta female head, very rare; (7) bronze religious baton or standard to carry in sacred processions, representing a lotus-flower surmounted by a crocodile which bears the divine boat—an extremely rare piece; (8) superb bronze representing the child Horus, surprisingly modelled—one of the most charming specimens of Saïtic art, showing, like the famous black statue of Horus already in the Louvre, with what artistic perfection the Egyptian artists of this period could render the most delicate and graceful contours of a youthful body; *etc.*—*Chron. des Arts*, 1890, No. 23.

XVI-Century Wood-Sculpture.—The Louvre has obtained an important addition in the "Calvary," comprising life-size figures carved in oak, a work of the XVI century, which was formerly in a church at Nivelles. The same museum is shortly to be extended by means of a newly-opened *salle*, containing antiquities from Tunisia and Algeria.—*Athenæum*, June 7.

SALES OF ANTIQUITIES.—The spring season was remarkable for the sale and dispersion of a number of important collections of antiquities and works of art. The most famous of these is that of EUGÈNE PIOT, already mentioned on pp. 244-5. Then comes the collection of ACH. SEILLIÈRE

conspicuous for works of the Middle Ages and the Renaissance. Finally, the SABATIER collection.

NEW WING OF THE TROCADÉRO.—In June, the Minister of Public Instruction, accompanied by M. Larroumet, Director of Fine-Arts, inaugurated, in the west wing of the palace of the Trocadéro, the new gallery of casts, which consists of six halls identical with those in the opposite wing. During the Exhibition of 1889, there were already in these halls a number of large pieces. Such were the portal of the w. facade of Saint-Pierre at Moissac, the corresponding portal of the Abbey of Charlieu, the central doorway of the west front of Saint-Gilles (Gard), the vault of the Great Clock of Rouen, part of the old *Hôtel de Berny* at Toulouse, etc. Numerous pieces have now been added, such as the doorway of the sacristy of the Cathedral of Bourges.—*Chron. des Arts*, 1890, No. 24.

POITOU.—An illustrative work on *Paysages et Monuments du Poitou* is being issued, by subscription, by M. Jules Robuchon, Paris. The illustrations consist of Dujardin heliogravures after photographs taken by the author. The work constitutes a monograph of the monuments of the ancient province of Poitou, composed of the districts of La Vienne, Deux-Sèvres, and La Vendée.—*Builder*, July 12.

RENNES.—The excavations, under the direction of M. Decombe, on the site of the ancient city-walls, rue Rallier, where have been found some inscriptions of which we have already spoken (p. 246), have brought to light seventeen milestones, either entire or in fragments. One of them, in magnificent preservation, is 2.10 m. in height; another (in two fragments), if restored, would be 2.20 m. They may be thus classified: Caracalla and Geta (?), 1; Maximinus, father and son, 2; Posthumus, 2; Victorinus, 4; Tetricus, the father, 3; undetermined fragments, 5.—*Cour. de l'Art*, 1890, No. 27.

RONCESVALLES.—The portrait-statue of Sancho el Fuerte, of Navarre, one of the victors at Las Navas de Tolosa (1212), which had been buried in the church of Roncesvalles since 1622, was disinterred by the prior and canons on June 17. The statue was found, almost perfect, in the spot indicated in the MS. of Huarte (preserved in the convent), an eyewitness of the hiding of the sculpture now brought to light.—*Academy*, July 26.

ROUEN.—EGYPTIAN ANTIQUITIES.—M. G. Le Breton, director of the ceramic museum of Rouen, has recently returned from Egypt with a large collection of antiquities. The ceramics and glassware will be placed in the municipal ceramic museum. The other objects—mummies, jewelry, stuffs, lapidary inscriptions, papyri, bronzes, alabastra, sculptures in wood and stone, etc.—will be given to the departmental museum of antiquities.—*Chron. des Arts*, 1890, No. 22.

GERMANY.

AUGSBURG.—RECOVERY OF PAINTINGS BY ULRICH APT.—Some months back, Dr. Alfred Schmidt made a discovery of some importance. In the central panel of a well-known altar-piece in the Augsburg Gallery (Nos. 47-51), usually ascribed to Altdorfer, he deciphered the letters A P T, introduced on a small heraldic shield. These evidently refer to the painter, as the donor is known to have been of the Rehling family. The name of Apt occurs frequently, in the old registers of the painters' guild at Augsburg, from the second half of the fifteenth century up to the middle of the sixteenth. Manifestly by the same hand as the Augsburg picture are the Transfiguration of the Cassel Gallery, the small Pietà of the Munich Pinacothek, and the large Triptych belonging to the university, but lent for a term of years to the Pinacothek and exhibited there in one of the cabinets. These two latter pictures, formerly ascribed to Altdorfer, are now, on the authority of Dr. Schmidt, attributed to Ulrich Apt, who was born about 1460 and died in 1532.—*Academy*, Aug. 23.

BERLIN.—ACQUISITIONS BY THE MUSEUM.—*Statue of the Ancient Empire.*—The Egyptian Department of the museum has recently acquired an important wooden statue of the ancient empire, found to the right of the railway between Medinet-el-Fayûm and Edeva.—*Athenæum*, Aug. 16.

Iliac Vases.—The museum has recently purchased a large number of vases with reliefs representing scenes from the Iliad, the Odyssey, the epic and Theban cycles, with inscriptions relating to the figured episodes. These Iliac vases, of which several examples were already known, will appear in a special publication.—*Revue arch.*, 1890, I, pp. 302-3.

FRANKENSTEIN.—DISCOVERY OF MEDIÆVAL COINS.—Of the coins of the x and xi century found in 1889 at Frankenstein (Silesia), 35 cut denars and 13 fragments are described by Herr F. Friedensburg in the *Zeit. f. Numismatik*, 1890, 2, pp. 210-12. The greater part has been placed in the museum of Silesian antiquities at Breslau. The discovery, consisting largely, as it does, of Bohemian coins, is of especial interest for the history of the province, as a striking numismatic proof of the invasion of Silesia by Bretislav of Bohemia in 1039.

OBERNBURG.—ROMAN ANTIQUITIES.—Herr W. Conrady writes for the *Westdeutsche Zeitschrift* (1890, II, pp. 164-99) a full account of his recent excavations in the town of Obernburg on the Main on the site of a large Roman *castrum*. At the beginning a Roman *ara* in fair preservation was found, and then a series of inscriptions, one of which is dated in the consulate of Aper and Maximus, 207 A. D. There is also a strangely rude sepulchral monument with figures of the deceased and his family, surmounted by a youthful seated allegoric figure, while on each side is another alle-

goric figure holding an inscribed disk. It bears the inscription: DI·M·|
GIRISONI USCUBI | FILIO ET BIBULIAE VE|RECUNDI FILIAE CO|NJUGIBUS
GIBAIS | OTRI HYADEIA CAEDA | MEM(*ores or oriae*) PIETAT(*is*).

OBRIGHEIM.—FINAL EXCAVATION OF THE CEMETERY.—Between Feb. 21 and March 25, the last part of this cemetery was excavated—that on the northwest side. Sixteen graves were opened. The contents are described by C. Mehlis in the *Berl. phil. Wochenschrift*, 1890, No. 22. Only one of these graves is remarkable, the last one opened: it is that of a woman, and has very rich contents. On her neck is a necklace of about 140 pearls of all sizes; in her ears, two large silver rings from which hang little baskets of silver filigree with little inlaid white plates. Such earrings are especially common in Hungary and rare on the Rhine. Obrigheim and Erpolzheim are the most western sites where this type, which originated in the East, has been found. There was also a chatelaine composed of a dozen chain links of bronze and iron, to whose supporting leather strap probably belonged six Roman coins—one of Antoninus Pius, another Byzantine. A unique object was a spindle cut out of ivory, a costly piece composed of four parallel rows of rings between which is incised a diamond pattern.

At present, about 300 graves have been opened on the site. The archaeological conclusions can be drawn only after the cleaning of the objects from the last sixteen tombs. The statistic conclusions that can be drawn from the contents, distinguishing nobles, freemen, servants or bondmen, have been given by C. Mehlis, in the *Archiv für Anthropologie* for 1890, under the title *Arm und Reich zur Merovingerzeit*. All the objects are placed in the provincial museum of Speyer, where they are systematically arranged under the heads of arms, ornaments, utensils, vessels, etc.

AUSTRIA-HUNGARY.

OLOBOK (prov. Ostrowo, in Bohemia).—**EARLY MEDIAEVAL COINS.**—On the banks of the Proсна, two miles from Olobok, a lot of coins of the tenth century were found. The German cities represented are Metz, Köln, Dortmund, Mainz, Augsburg, Regensburg, Nabburg: the emperors are Henry I, II, and Otho I, II, III. The series of Bohemian coins (74 perfect and 18 imperfect pieces) is, however, the most interesting. Some of these appear to be the earliest Bohemian coins. All the sixty types in the collection are carefully described by F. FRIEDENSBURG, *Zeits. f. Numismatik*, 1890, No. 2, pp. 202-10.

SCANDINAVIA.

We hear from Copenhagen that Professor Söderberg, of Lund, has discovered in a museum at Florence the lost fragments of the Franks Casket, of which the remainder is among the most valued possessions of the

British Museum. The casket is made of the bone of whales, carved with figures, and with Runic inscriptions of the eighth century, which Professor Stephens attributes to the North of England. The newly found portions include a representation of a scene from the Sigurd myth, explained by Runic inscriptions.—*Academy*, Aug. 2.

DENMARK.

COPENHAGEN.—ADDITIONS TO THE MUSEUM.—At the recent sale of the Sabatier collection, the Royal museum of Copenhagen made a number of important purchases: such are: (1) a black basalt statue of Anubis, of the reign of Amenophis III (xviii dyn.), of great beauty; (2) a group in black granite of a man seated by his mother—a beautiful work of the Saitic period, covered with seven inscriptions which show the figures to be that of a queen and her son Ahmes, second prophet of Amon in the great temple; (3) a seated statue of Osiris, remarkable for the inscriptions it bears; (4) a statuette of King Ahmes in calcareous stone—the figure is seated and covered with the *pschent*; (5) crouching statue of a man with both hands on his knees, called Sibü; 90 cent. high.

At the sale of the antiquities of the collection Eugène Piot (May 27), this museum acquired for the price of 13,675 francs, No. 14: head of a youth, under life-size, of the beautiful archaic style of the close of the vi cent. B. C.: smiling face, of a superb oval, the hair built up on the forehead in five rows of ringlets, bound with a *strophion* colored in red, and crowned with a double row of leaves. The execution is of admirable delicacy and precision. It is almost certain that this head represents an Apollon. Beautiful yellow patina; a slight scratch on the nose, which does not alter, in the least, the beauty of the sculpture; pedestal of white marble; height, 154 mil. It formerly belonged to the collection Péretié, at Beirút.—*Cour. de l'Art*, 1890, Nos. 12, 27.

VIGERSTED (Seeland).—**ANCIENT FRESCOES.**—Professor Kornerup has discovered some interesting old frescoes on the walls and in the dome of the ancient church of Vigersted in Seeland. There are also two paintings by Knud Lavard, said to be of great historic value.—*Builder*, July 12.

RUSSIA.

THE NECROPOLIS OF MOURANKA.—Among the most interesting of the reports made at the recent archæologic Congress at Moscow is that on the excavations made by M. Vladimir Polivanoff and M. de Tolstoi in an ancient cemetery of the village of Mouranka, government of Simbirsk, district of Senguileï. Among the objects found were a large number of bracelets of women and children, earrings, rings, and household utensils. According to M. Polivanoff, the character of the jewels proves that they

came from Bolgori, the ancient capital of the people of that name, which was, up to the close of the XIV century, the centre of the civilization and commerce of all the peoples dwelling on the banks of the Volga. All along the river has been found the same type of decoration as at Mouranka. In October 1889, the tombs were torn up and destroyed along an extent of two hectares, but, thanks to the law of 1888, a large number were preserved intact and the Imperial Archæological Commission of St. Petersburg is about to undertake methodic excavations.

In this cemetery there are no traces of artificial elevations or *kourgans*. The tombs were never dug to a depth of more than one metre; the bodies were placed in rounded wooden coffins, and were covered with tissues called in Russian *partcha*, resembling somewhat in their material the stuffs used for priests' robes. The date is given by Tartar silver coins placed by the deceased: they bear the names of Khan Oussbeck (1327) and his son Djanibeck (1346), and consequently belong to the XIV century. Local legends and names, and the absence of *kourgans* confirm the idea suggested by the coins, that this is a Tartar cemetery.—*Revue arch.*, 1890, I, pp. 347-50.

ROUMANIA.

M. Henri Revoil, the well-known architect and author of a great work on the mediæval monuments of Southern France, has been charged by the Roumanian Government to inspect the restoration, lately undertaken, of the historic monuments of Roumania. M. Bourgeois, Minister of Public Instruction, has authorized M. Revoil to accept and has also entrusted him with the mission to study the archæologic monuments of the country.—*Chron. des Arts*, 1890, No. 25.

MONTENEGRO.

DIOCLEA.—THE ROMAN CITY.—Reference was made on p. 250 of this volume to the discovery of the ruins of Dioclea or Doclea. Details have since been published in the *Revue archéologique* (1890, I, pp. 434-7) by A. Gérard and R. Cagnat.

Dioclea (in Servian Doukla) is three kilom. north of Podgoritz, at the confluence of two rivers, the Zeta and the Moratcha on an admirable site. The old Roman city must have been on a strategic road leading from Albania to Pannonia and Sirmium. The site and walls are easy to recognize. A few weeks' excavation has enabled a Russian, M. Paul Rowinski, to draw up the plan of the ancient walls with their two gates to the north and south. Within this space, to the west, on the borders of the Zeta, were found the clear and intact foundations of a building which has the aspect of a civil basilica. According to the usual arrangement, it consists of a long pillared gallery with two rows of columns, ending at the north in an

apse. The traces of the piers, the sites of the columns, the apse, the mosaic pavement, all are perfectly recognizable. There are also many fragments of columns, capitals, decorated panels, fragments of a frieze, remnants of painting in the apse, and, finally, some inscriptions which appear to give the list of the statues erected to illustrious persons by the side of the basilica. Outside the northern gate is a street of tombs.

TURKEY.

MOUNT ATHOS.—DESTRUCTION OF MONASTERIES BY FIRE.—Advices from Athens announce a most disastrous fire upon the celebrated Mt. Athos, the holy mountain of the Greek Church. The fire has destroyed the largest part of its wonderful forests. Of the twenty Greek monasteries which have been located upon the mountain for centuries several have been completely destroyed, including four churches. The damage has been estimated at 5,000,000 f. Twenty monks and hermits perished in the flames.—*Boston Herald*, in *Amer. Architect*, Aug. 16; *London Times*, Aug. 22.

CONSTANTINOPLE.—The wing of the new archæological museum which is intended for the housing of the sarcophagi from Sidon and other places is ready, and will be presently opened to the public.—*Athenæum*, June 21.

GREAT BRITAIN.

WALES.—BRITISH INSCRIPTIONS OF THE EMPEROR VICTORINUS.—"Mr. Whitley Stokes, in his *Notes from Rennes*, in the *ACADEMY* of July 26, 1890, mentions a stone inscribed in Roman capital letters of the third century of the Christian era in honor of the Emperor Piauvonius Victorinus, found last April in digging the foundation of the *Bazaar Parisien*. This emperor was one of the thirty tyrants who was supposed to have been slain 268 A. D., who had reigned in Gaul, 'and probably also in Britain,' for somewhat more than a year; and it is added that the emperor's Gentile name is spelt with only one v on a Lincoln milestone (*Eph. Epigr.*, VII, No. 1097). It is worthy of notice that there is also another inscription to the same emperor upon a military stone discovered by the late Mr. Grant Francis in Glamorganshire near Pyle, and deposited by him in the museum at the Royal Institution at Swansea, of which I published a drawing made from the rubbing by the discoverer in my *Lapidarium Walliæ*, p. 41, pl. 27, f. 1. Here the inscription reads: IMP. | M. C. PIA|VO-NIO | VICTOR. | INO. AVG. Another stone, which I found in a ditch at Scethrog, also records the name of Victorinus with another name no longer legible—*Lap. Wall.*, pl. 32, f. 7."—I. O. WESTWOOD, in *Academy*, Aug. 2.

CHESTER.—PROPOSED EXCAVATIONS.—Some repairs executed three years ago in the north wall of Chester resulted in the discovery of Roman inscrip-

tions and sculptures; and a further exploration, started by the Chester Archaeological and Historic Society, produced more inscriptions and sculptures. It is now proposed to set on foot further explorations at the same spot. The former discoveries have excited great interest both in England and on the Continent, and Professor Mommsen, of Berlin, has written to Mr. Haverfield strongly urging further search. Of all the historic sites in England none are so likely to aid our knowledge of Roman history as the Roman military centres, and it is well known that Deva was garrisoned by the Twentieth Legion from the earliest times almost until the end of the Roman occupation of our island. The area of search will be the Dean's Field and the north wall adjoining the portions previously examined.—*Academy*, June 7.

ELY.—THE DIOCESAN RECORDS.—The Bishop of Ely has recently caused all the ancient records of the diocese, hitherto scattered in different places, to be removed to the palace at Ely, where they are now deposited in a spacious muniment room, and made available for historical research. In further pursuance of his design, the Bishop has commissioned Mr. A. Gibbons, author of *Early Lincoln Wills* and other similar works, to prepare a calendar and concise view of these records, which—it need hardly be said—are of more than merely ecclesiastical interest. The episcopal registers proper begin in 1337; and the visitation books and the transcripts of parish registers are in unusually good preservation. It is proposed to print copies of all the wills, and also of the marriage register of the old chapel of Ely House, Holborn. The volume will be issued in a limited edition of fifty copies; and subscribers should address themselves to Mr. A. Gibbon, The College, Ely.—*Academy*, June 7.

KENILWORTH.—EXCAVATION OF THE MONASTERY.—The work of opening up the remains of the Priory Church and the adjoining monastic buildings has begun. The entrance to the monastery was soon found, the gateway being of massive proportions and about 9 ft. wide: they then traced the walls of a spacious room, about 16 ft. wide, which formed the main entrance to the monastery and cloisters [probably the dwelling of the gate-keeper or *portarius*]. The excavation of this room brought to light a quantity of finely-worked stone, the supports of the groined arched roof, and two central keystones with finely-carved bosses, as cleanly cut and as crisp in outline as when first made; also two massive corbels with circular worked caps and fluted brackets. Further on was found a door leading into an outer court, and in close proximity to the western door of the church.—*Builder*, July 5.

LONDON.—The Amorite, Phœnician, and Jewish pottery, casts of sculpture, etc., found by Mr. Flinders Petrie in the course of his recent excavation for the Palestine Exploration Fund on the site of Lachish, will be publicly

exhibited with his Egyptian collections of this year at 6 Oxford Mansions, near Oxford Circus, from Sept. 15 to Oct. 11.—*Academy*, Aug. 2.

BRITISH MUSEUM.—*Presentation of an archaic antefix.*—Lord Savile has presented to the Museum an archaic terracotta antefix, discovered in the excavations he is conducting at Civit  Lavinia, the site of Lanuvium. It is of great beauty and very large, the front portion semicircular in form, measuring 15 ins. high by 16½ ins. wide. The clay is bright-yellow, with details laid in with deep-red and brownish-purple. The hair is arranged low over the forehead, and falls in three locks on either side; it is surmounted by a *stephan * painted with a m ander-pattern. From the crown rise two stalks which hang down on either side of the face, terminating on the level of the chin in a palmette. On these palmettes rests an arch of broad *ovolo*, forming a frame for the whole: this *ovolo* is connected with the palmette stalks by a network pierced *  jour*, consisting of three rows of semicircular apertures. The neck is encircled with a necklace.

The mask is strengthened at the back by the addition of a stay which joins the upper part of it to the actual covering-tile, of which it forms the ornament, making as it were a kind of flying buttress. This antefix was recently the subject of a paper read by Lord Savile at a meeting of the Society of Antiquaries.—CECIL SMITH, in *Class. Review*, July, 1890.

R arrangement of Galleries.—Two bays in the gallery of minor Egyptian and Assyrian antiquities in the upper story of the British Museum have been recently re ranged and thrown open to the public. One contains the Babylonian engraved stones, boundary demarcations, title-deeds, grants of land, records of purchases, *etc.*, recently removed from the basement, some as early as 4000 B. C.; on the other side are Assyrian ornaments, *etc.* The other bay contains the Mexican and Peruvian antiquities. The arrangement of the prehistoric gallery at the head of the great staircase is now complete. Among the objects now accessible to the public are the Layton collection of bronze vessels, recently found in the Thames, and the Spanish antiquities collected by MM. Siret, and described in their great work.

New General Handbook.—We understand that the authorities of the British Museum have in preparation a sixpenny handbook or guide to the various collections in the museum, and that it will be ready in about three months. This will, no doubt, be a boon to the general visitor, who will be spared some confusion thereby, but it will not supply the long existing and urgent need of handbooks on each collection, concise, accurate, and judiciously illustrated, without which the Museum is a labyrinth of despair to all but trained students.—*Academy*, Aug. 9.

OXFORD.—The Rev. Greville J. Chester is at present staying at Oxford, where he is engaged in cataloguing the fine collection of Hittite and Ph nician seals in the Ashmolean Museum.—*Academy*, Aug. 2.

PICKERING.—XV-CENTURY WALL-PAINTINGS.—The remarkable series of fifteenth-century wall-paintings lately uncovered and repaired at the church of Pickering is about to be fully described, together with other details of this interesting church, by Rev. Dr. Cox. Mr. Glaisby, of York, is preparing photographic illustrations.—*Athenæum*, Aug. 23.

EAST SHEFFORD.—AN ANGLO-SAXON CEMETERY.—Mr. W. Money communicated to the Society of Antiquaries, on March 20, a note to the following effect, accompanied by some objects. In the course of construction of the Lambourn-Valley Railway, near the Manor Farm, East Shefford (Berkshire), has been discovered what appears to be an extensive Anglo-Saxon burial-place. The situation of the cemetery, like many other Anglo-Saxon cemeteries, appears to have been selected on account of its commanding height, *etc.* Within the excavated space (some 120 yards in length) a large number of skeletons have been met with at a depth of about 2 ft. 9 ins. below the surface. By the side of one of the male bodies was a broad, straight-bladed iron sword of the distinctive Saxon type: it is double-edged, and apparently had been enclosed in a scabbard protected at the top and bottom with an outer casing of bronze, portions of which, with the wood attached, are preserved. Among other objects were an iron spear-head; two knives known as *seaxas*; a cruciform *fibula* of copper-gilt, on a woman's shoulder, and, on another, two circular bronze *fibulae* of the type usually found with Saxon interments in Berkshire, Oxfordshire, and Gloucestershire. The date must be the sixth or seventh century.—*Proceed. Soc. Antig.*, vol. XIII, No. 1, pp. 107–8.

SILCHESTER.—The project, started by the Society of Antiquaries, for the systematic excavation of the entire site of Silchester has been cordially taken up. Subscriptions to the amount of £200 have already been received, in addition to Dr. Freshfield's offer to provide the cost of laying bare one *insula* or square.

AMERICA. UNITED STATES.

NEW YORK.—METROPOLITAN MUSEUM.—GEORGE F. BAKER, Esq. of New York City has purchased, and presented to the Metropolitan Museum of Art, Brugsch Bey's entire collection of Egyptian textile fabrics, covering a period from the earliest times from which mummy-cloth is obtainable down to the seventh or eighth century after Christ. The collection contains about 860 pieces. The Museum already owned a collection of 369 pieces purchased from Theodor Graf, of Vienna. Probably the Museum now has as fine a collection of these objects as exists anywhere. The bulk of Theodor Graf's collection went to the Imperial Museum of Industrial

Arts at Vienna, one set of duplicates going to the South Kensington Museum in London, the other to the Metropolitan Museum. We wish some generous and public-spirited man would buy the Graf collection of colored Egyptian portraits, of the time of the first Christian centuries, the best in the world.—*N. Y. Independent*, Aug. 28.

Models for the Museum.—*La Champagne*, from Havre, brought two large models (one-twentieth full size) of the Parthenon and the main façade of Notre Dame, of Paris, to be followed later by its other façades, as well as by models of the Temple of Karnak, the Pantheon, the Arch of Constantine, St. Trophime, etc. The Parthenon and Notre Dame will be set up in the Great Hall of the Museum, with the practical assistance of M. Joly, who accompanied them to this country. The restorations shown in the model of the Parthenon embrace the latest results of M. Chippiez's profound study of the subject.—*N. Y. Tribune*, Sept. 12.

COLUMBIA COLLEGE.—*Avery Architectural Library.*—The Avery Architectural Library in memory of Henry Ogden Avery (architect, who died April 30), founded by his parents, Mr. and Mrs. Samuel P. Avery, provides: (1) The giving of the private library formed by the late Henry O. Avery, consisting of about two hundred volumes relating to the history and practice of architecture and the connecting arts, volumes of photographs, and his professional books. (2) To pay for the purchase of books most useful to the student and profession for reference, which may be collected by the first of January next, not exceeding the sum of fifteen thousand dollars. (3) On the first of July was paid the treasurer of Columbia College fifteen thousand dollars to serve as an endowment fund, the income of which is to provide for the binding and repairing of the books, and for the purchase of new publications and other works in the same line as provided for.

The purchases are to be made by a commission of three persons, viz.: the librarian of the college (now Mr. George H. Baker), the professor or acting professor of the architectural department of the School of Mines (now Mr. William R. Ware and Mr. A. D. F. Hamlin), and Professor Russell Sturgis, whose successor in case of his death or declination at any time is to be selected by the other two members of the commission, and who is to be always an architect not immediately connected with the college. The books are to be always kept together in a separate room or alcove, and are to be known as the "Avery Architectural Library," and to be used as a library of reference only.—*Home Journal*, July 16.

A. L. FROTHINGHAM, JR.

SUMMARIES OF PERIODICALS.

ARCHIVIO STORICO DELL'ARTE. 1890. Jan.-Feb.—A. VENTURI, *Emilian Sculpture during the Renaissance. I. Modena* (pp. 1-23). Modena was very backward in taking any share in the Renaissance, being at a very low ebb during a great part of the xv century. Agostino di Duccio of Florence first came, in 1442, to show its inhabitants the new style. A part of the marble altar of the cathedral by him is encased in the wall of the church with the inscription: AVGVSTINVS · DE · FLORENTIA · F · 1442. To the same artist belongs another group now placed in a similar position. Native art, however, began only with *Guido Mazzoni dei Paganini*, who embodied all its peculiarities. He began by executing realistic masks, superintending public festivals and religious dramatic performances. He then tried his hand at modelling terracotta figures, in which art he showed great originality of a realistic sort, his work beginning in about 1470. He executed large compositions of terracotta figures, coloring them also with delicate tints. He died in 1518 after having spent many years away from his native city especially in Venice (1489) and Naples (1489-95). In 1495, he followed Charles VIII to France; and, in 1498, he became a member of the school formed at Tours. He had the honor of then executing the famous monument of Charles VIII in Saint-Denis, said to be the finest monument in France at that time, signed OPVS PAGANINI MVTINIENSIS: it was destroyed by the French revolutionists. Subsequent to 1507, he executed two statues of Louis XII, after whose death in 1515 the artist returned to his native city.—U. Rossi, *The Carrand collection in the Museo Nazionale at Firenze* (pp. 24-34). This is the last of a series of papers in which a cursory survey is given of the best pieces in this famous collection generously given to the Museum in Florence and especially noted for its ivories. The present paper describes the bronzes, plaquettes, medals, seals, cameos and intaglios, leathers, wood-sculptures, stuffs, arms, iron-work, marble sculptures, and paintings. The bronzes are of great importance, and are especially strong in pieces of industrial art such as vases, candelabra, inkstands, bells, statuettes: the earliest pieces date from the xii century, but the greater number from the Renaissance: Andrea Riccio is well represented, and so are the schools of Venezia and Padova, while the Tuscan group, though small, is very choice. A number of pieces belong to France and the Orient. The collection contains 171 plaquettes. One of the most important series is that of the stuffs.—NATALE BALDORIA,

The artistic monuments of San Gimignano (pp. 35-68). This long paper is a summary of what is known of the monuments of San Gimignano, whose paintings have been so carefully described by Crowe and Cavalcaselle, and are known also from photographs. The paintings and sculptures are treated here in detail. The documents are mainly obtained from PECORI, *Storia della terra di S. Gimignano*.—NEW DOCUMENTS. U. ROSSI, *Zaccaria and Giovanni Zacchi da Volterra*. For a summary of these documents see p. 240 of the JOURNAL.—REVIEWS and BIBLIOGRAPHY.—MISCELLANIES.

A. L. F., JR.

ARCHIVIO STORICO LOMBARDO. 1890. March.—A. GAROVAGLIO, *The Worship of Mithras in Lombardy and especially in Milano*. This short paper describes a number of monuments relating to the worship of Mithras found in or near Milan and now in the archaeological museum of that city. These are: (1) a votive altar dedicated to Cautopates, a well-known appellative of Mithras, was one of many (that were lost) which decorated a Mithraic cave at the foot of Rocca d'Angera, on which stood the mediæval fortress of the Visconti: from it came, also, the four beautiful capitals which have in relief the principal Mithraic symbols (griffins and lions). (2) The so-called *urna di Valperto*, elsewhere illustrated. (3) A monument found in rebuilding a house at the juncture of Via Oriani with Via S. Giuseppe: the sculpture shows a continuation of Greek influence, while the architecture is already corrupt. A fine youthful figure occupies a central niche and is surrounded by the usual naked genii; there are fragments of two bulls, part of a frieze with four symbolic griffins. There are, also, a badly-mutilated figure of Mithras, and a lotus-flower. The beauty of the sculpture leads the writer to assign this newly-discovered monument to the period between Hadrian and the Antonines.

A. L. F., JR.

BULLETTINO DI ARCHEOLOGIA CRISTIANA. 1888-89. Nos. 1-2.—G. B. DE ROSSI, *Discoveries in the cemetery of Priscilla during 1888-89*. Gallery κ of the primitive nucleus of the cemetery of Priscilla was originally intended to receive a series of sarcophagi in arched niches. From it, passing into an unexplored portion of the catacomb, a similar grandiose *ambulastrum* was reached, filled with fragments of paintings and sarcophagi. There were several separate *hypogea*, the plan of the main one being published in pl. I-II. They were originally isolated, though closely connected with the galleries that surround them on all sides. 1. *An anonymous hypogeum with sarcophagi*. This gallery had seven niches for sarcophagi, of which only small fragments remain, showing them to be of a very early date, as they bear no distinctively Christian subjects or decoration. There were found early inscriptions of *Parhesiastes* and

Petronius Secundus. In one of the niches are remnants of frescoes: the subjects are (a) the curing of the man born blind (?); (b) Adam and Eve tempted, and Jonah swallowed by the whale. The juxtaposition of these two scenes is symbolic and quite new. The art is far earlier than that of the similar frescoes of the late-third and the fourth century. II. *The hypogeum of the Acilii Glabriones.* A short notice of this important discovery was given in the JOURNAL, vol. IV, pp. 214-15. The hypogeum in question was in the shape of a gamma. The inscriptions of the *Acilii Glabriones*, fragments of which were found, furnish occasion to the writer to give a complete monograph of this family, proclaimed, by the Emperor Pertinax, to be "the most noble of the patricians," whose history is continued by consular lists and epigraphic monuments down to the fall of the Empire. An epitaph is explained as that of *Acilii Verus* and *Priscilla* his sister, children of *Vera Priscilla* wife of *Manius Acilius Glabrio*, consul in 152 A. D. The writer seeks to prove that *Manius Acilius Glabrio*, consul in 91 A. D., was condemned at the same time and for the same reason as *Flavius Clemens* and *Flavia Domitilla*, i. e., for being a Christian. It is evident, from the inscriptions, that this hypogeum served for the burial of several successive generations of the family and dependents of the *Acilii Glabriones*; also that this was one of the earliest nuclei of the catacomb of *Priscilla*.—A short treatise follows on *The monogram X̄ and the sigla IH̄X̄ in the hypogeum of the Acilii and surrounding galleries.* Attention is called to the importance of the X̄ used as a part of the text as a *compendium scripturae*; and to the rarity of the early sigla HH (IH) instead of IHC in the group IH̄X̄ (Ιησοῦ Χριστοῦ).—In a chapter on *The Acilii Glabriones buried in the cemetery of Priscilla*, is given a list of the members of the family that attained to the consulate from A. D. 91 to the beginning of the fourth century. With these it is attempted to connect the *Acilii* mentioned in the catacomb inscriptions.—A special chapter is given to the *Manius Acilius Glabrio, consul in 91 A. D., condemned to death by Domitian*, containing also a plea for the recognition of a noble element among early Christian society in Rome, and an attempt to reconcile the supposed Christianity of the *Acilii* with the religious and political honors showered upon them.—*Note on Acilia Vera buried in the crypts of Lucina.*—*Meetings of the Society of Christian Archaeology.* This is a summary of the addresses made at the meetings of the society held during its thirteenth year, 1887-88.—*Note on T. Petronius Secundus, prefect of the praetorium under Domitian.*

A. L. F., JR.

BULLETTINO DI PALETOLOGIA ITALIANA. 1890, Nos. 1-2.—N. MORELLI, *Two caverns recently explored in the territory of Toirano* (province

of Genova) (pp. 1-19; pl. 1). A notice of this paper will be found on p. 235 of this volume.

Nos. 3-4.—PIGORINI, *A Necropolis of the bronze age at Copezzato in the commune of San Secondo Parmense* (pp. 21-38). A shorter report by the same writer on this discovery, published in the *Notizie degli Scavi*, was summarized on p. 221 of this volume. Further peculiarities should be added. Not only are the cinerary vases placed so close together as often to touch, but often one is found within another, both of them full of human bones. This economy of space is also found in most of the necropoli mentioned above. This arrangement was made possible only by not burying the vases at all, or, more probably, by covering them only so far as the neck. There seems, therefore, to have been no distinguishing sepulchral mark by which to identify them. The examination of this necropolis is accompanied by a running commentary on the others of the same class already enumerated. Some *barbaric* (before 773 A. D.) remains were found in the neighborhood, at a depth of 1.50 met.; some *Roman* antiquities at a depth of 2.50 met.; while the tombs of the *terramaricoli* of the bronze age were at a depth of seven metres. A calculation based on the position of these various strata would lead to the thirty-third century B. C. for the date of this early necropolis.—PIGORINI, *The bronze fibula in the terremare* (pp. 38-40). Professor Orsi recently expressed the opinion that the *terremare* could not be as early as suggested in the preceding article, because in them as well as in the contemporary *palafitte* of Lake Garda have been at times found bronze fibulæ identical with two from tombs in Mykenai supposed to date from the XII century B. C. But, as Undset remarks, no such fibulæ have been found with certainty in the real stratum of the *terremare*. They appear to have been imported at the close of the period of the *terremare*. This fact and that of the discovery of terracotta figurines at Hisarlik, Mykenai, Tiryns, etc., seem to demonstrate that the *terremare* period, beginning we know not when, came to a close at the time when there began to arrive in Italy from Greece and Asia Minor the elements which created, in the valley of the Po, the civilization of the first bronze age.—STROBEL, *The dog in the terremare* (pp. 40-44). This is a defense of the writer's assertion of the existence in the *terremare* of a third species of dog which he terms *canis spalletti* Strob, and which he adds to the other two previously-known species, *canis palustris* Rütt. (Jeitt.), and *canis matris optima* Jeittels. His classification was published in his article, *Le razze del cane nelle terremare dell' Emilia*, in the *Bull. di Palet.*, 1880. His opponent is T. Studer in *Der Hund der Battaks auf Sumatra*, who ignores the *canis spalletti*, substituting apparently the *canis f. decumanus*. The special and radical characteristics of the *canis spalletti* are pointed out.—BOOK REVIEWS.—NEWS.

A. L. F., JR.

BULLETIN DE CORRESPONDANCE HELLÉNIQUE. 1889. May.—

S. REINACH, *Antiquities discovered at the theatre of Delos* (pls. XII, XIII). During the year 1882, excavations were made at the theatre of Delos under S. Reinach, bringing to light the three front rows of seats and a portion of the orchestra with the foundations of the stage. As instruments of precision were lacking, a plan of the theatre was not made. The few figured monuments and inscriptions discovered are here published. Three of the four inscriptions were found upon bases for statues: one acquaints us with the name of a hitherto unknown Athenian dramatic author, *Dionysios son of Demetrios*, who was victorious in the contests for tragic and satiric poetry. The most interesting monument is the pier of a terminal herma, covered with *graffiti* of the first century B. C., amongst which are figured animals of various kinds.—FOUGÈRES, *Inscriptions from Thessaly*. The twenty-five inscriptions here published were copied in Thessaly during the month of May, 1887. They were found at Larissa, Palaia-Larissa, Phalanna, Kiërion, Pharsala, Pheres and Halos.—P. JAMOT, *Boundary-stone between the territories of Kopai and Akraiphiai*. At the extremity of Cape Phthelio is found a huge cubical rock inscribed: Ὀρια Κ[ω]π[ί]ων [ν] | ποτ' Ἀκρηφείας | ὁριτ[ε] [δ] ν[υ]ντων Βοιωτῶν. The forms of the letters point to the first years of the restoration of the Boiotian League under Kassandros. The stone marks the boundary of the towns Kopai and Akraiphiai, and seems to prove that the lake, or at least the western part of the lake, belonged to Kopai. Whether the intervention of the League was *de jure* or casual is undetermined.—TH. HOMOLLE, *Decrees of the Athenian people in Delos*. Several long decrees are here published. From one of these it appears that the *agoranomoi* existed at Delos after they had ceased to exist at Athens. From another it appears that the same ephebic institutions existed at Delos as at Athens.—F. DURRBACH, *Inscriptions from Imbros*. Five inscriptions are here published, one of which seems to date from the v century. The rest are later.—P. FOUCART, *Athenian Decree of the year 352, found at Eleusis*. This is a long inscription, found at Eleusis in the excavations under the direction of M. Philios and published in the *Ephemeris* in 1888. It has now been very thoroughly studied and reconstructed by M. Foucart. The subject of the inscription relates to the *ἱερὰ ὁρμή* or sacred territory between Attika and Megara dedicated to Demeter and Kora. The inscription furnishes new illustrations of the mode of administration under the democratic government, and a new mode of consulting the oracle. The latter is especially interesting. The question to be decided was whether this sacred territory should be rented or left uncultivated. The two answers were engraved separately on two metal tablets, which were then rolled up and placed in similar packages. These packages were then drawn and deposited, one

in a silver and one in a golden urn. These were sealed and counter-sealed and guarded in the akropolis until the deputies returned from the oracle, which was asked to decide which urn contained the proper answer. The urn indicated by the oracle was then opened in the popular assembly and the answer revealed. The reply of the oracle in this case is unknown, though it probably indicated that the sacred territory should remain uncultivated.—H. LECHAT, *Hermes and the Graces* (pl. XIV). The bas-relief here published was discovered by M. Kabbadias, in Jan., 1889, on the Akropolis at Athens. It is an archaic Pentelic marble relief of little artistic merit, but interesting for the subject, which represents Hermes and the Graces with a fifth personage who seems to be an initiated hero. The interpretation of the female figures as Graces, instead of Nymphs, Seasons, or Daughters of Kekrops, seems to be justified by the important position held by the Graces in the ancient Athenian cult. The hero would be related to the Graces as Triptolemos to the divinities of Eleusis or Erichthonios to the Daughters of Kekrops.

December.—G. FOUGÈRES, *The Lion of Tegea* (pl. VI). This relief has long been known. It was mentioned by Ross in 1834, better appreciated by Conze and Michaelis in 1860, and by Milchhöfer in 1879, but is now reproduced for the first time. It appears to be a slab of a frieze of a date not later than the IV century, in style reflecting the art of Skopas, and probably once decorated the temple of Athena Alea.—G. RADET and P. PARIS, *Inscriptions from Syllion in Pamphylia*. Three decrees are here published which were made in honor of the family of the Megakles, one of the most powerful in Syllion, of which various members were public benefactors. The public assemblies of Syllion seem to have been three in number, a *boule*, a *gerousia* and an *ekklesia*, while the municipal functions were discharged by the *dekaprotia*, the *demiourgia* and the *gymnasiarchia*. The classes of the population ranking lower than citizens were also three in number, the *ouindiktarioi*, the *apeleutheroi* and the *paroikoi*.—M. COLLIGNON, *Statue of Poseidon found at Melos*. This statue was discovered at Melos in 1877 at a locality called Klima, below the amphitheatre. It is now in the Central Museum at Athens. It is a colossal statue, furnishing no new detail in the figured representations of Poseidon, showing to a certain extent the influence of the Pergamene school and dating probably from the second century B. C.—G. DOUBLET, *Decree of the Senate, from Tabai in Karia*. This inscription was copied in 1887 from a marble in the wall of a house at Davas, the ancient Tabai. It has a striking resemblance to the senatorial decree of Lagina (*Bull. de corr. hellén.*, ix. p. 437). After referring to the conduct of the inhabitants of Tabai during the war with Mithridates, demands are made (1) for the confirmation of the attribution of certain lands granted them by Sulla; (2) that they be permitted to fortify Thy-

essos, and (3) that the Romans take into consideration their kindly disposed character.—H. LECHAT, *Basreliefs in the Museum at Constantinople* (pl. ix). Two reliefs are here described. One, which hails from near Pergamon, is a votive offering representing a horseman before an altar, where also stands a heavily-draped female figure. The horse and attendant of the hero stand at one side. The relief bears no inscription, but its style indicates that it belongs to the end of the fourth century or the beginning of the third. The second relief was brought from Kyzikos in 1869. It is inscribed with a fragmentary honorary decree and a head in profile. This may be a portrait, but it resembles so strongly the head of Pan on coins from Pantikapaion as to suggest that the person honored was a resident of that town. Possibly it was Leukon I, who was similarly honored by the Arkadians of Kreta and whose date corresponds with the age of this relief.—E. LEGRAND, *Two Latin Inscriptions from Karystos*. These inscriptions were found in June 1889, and relate to the history of the quarries of Karystos.—M. HOLLEAUX, *Edict of King Antiochos II*. This is an improved edition of the important inscription discovered at Durdurkar in Phrygia in 1884, and published in the *Bull. de corr. hellén.*, in 1885.—G. COUSIN and G. DESCHAMPS, *Letter of Dareios, son of Hystaspes*. This inscription was discovered in April, 1886, at Deïrmendjik, near the road from Tralleis to Magnesia, and is now in the Louvre. It is in characters belonging to early imperial times, but would appear to be an authentic copy of a letter written by Dareios to Gadates. In this letter Dareios praises his servant for having planted in Asia Minor trees from beyond the Euphrates, but blames him for not having sufficiently respected the sacred gardeners of Apollon.—S. REINACH, *Archaic statues of Kybele discovered at Kyme* (pl. viii). Amongst the objects discovered by M. Reinach at Kyme in 1881, were two figures of Kybele reproduced on pl. viii. These figures are closely related in type to the seated figures which lined the sacred avenue at Branchidai, though one is here in basrelief. Terracotta figurines of this class are numerous, but the most interesting of such monuments are the 47 small calcareous figures in the museum of archaeology at Marseilles. These would appear to have been brought from Phokaia or some other city of Asia Minor. The Kybele type was used frequently for sepulchral monuments, and is ultimately of Babylonian origin.—S. REINACH, *Sepulchral Inscriptions discovered at Kyme*. Six brief inscriptions from sepulchral stelai are here published.

ALLAN MARQUAND.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1889. Nos. 1-4.—B. I. LEONARDOS, *Inscriptions of the Amphiareion* (contin.). No. 24, the earliest inscription

found in the Amphiareion, is cut upon a Hermes, the head of which is wanting: The hair fell over the breast in three curls on each side, and down the back in a broad band of wavy locks. The inscription, Στρόμβιχος ἐποίησεν Ἀθηνάϊος, gives the name of a new artist. No. 25, Diogenes, son of Asklepiades a Halicarnassian, dedicated his brother Herakleitos to Amphiaraios. Thoinias, son of Teisikrates, the Sikyonian, made (the statue). Thoinias is mentioned on the monument of Brutus, and Teisikrates, son of Thoinias, on the monument of Sulla (Ἐφημ. Ἀρχ., 1885, pp. 103, 105; 1886, p. 55). No. 26 is a list of the silverware of the god Amphiaraios with the names of the donors. The list was made when Lysandros was archon, Saon was priest of Amphiaraios, Hierokles son of Damarchos, Hieron son of Nikobios, and Philistides son of Thrason were hierarchs. The date is about the same as that of several other inscriptions of the Amphiareion. This inscription is compared with several others, especially with CIG, 1570. No. 27 is a metope with the inscription Ν: a similar metope with inscription ΓΟ is described in Ἐφημ. Ἀρχ., 1885, p. 154. If the two belong to the same word, it might be ε]πο[ίησε]ν, or, if not, ἀνέθηκε]ν. No. 28 is a decree in honor of Pytheas, son of Sosidemos, from Alopeke, who had, as overseer of springs, rebuilt the springs of Ammon and Amphiaraios. The date is the archonship of Nikokrates, 333 B. C. Nos. 29-33 are cut upon broad pedestals (πλατεία βάθρα) composed of several blocks or slabs: No. 29 contains eight honorary decrees of the city of Oropos, the second of which is very fragmentary and is in Boiotian dialect; No. 30 contains eight similar decrees besides dedicatory inscriptions of statues of Ptoion and his wife Aristonike dedicated respectively by Aristonike and her daughter Timagora; No. 31 contains the inscriptions (Ἐφημ. Ἀρχ., 1885, p. 107) recording the dedication by Demokrite of statues of her father and son, besides two honorary decrees of the Oropians; No. 32 contains two honorary decrees of Oropos; No. 33 records the dedication, by Mnaseas, of statues of his father Diodoros and his mother Phanistrate, and contains six honorary decrees of Oropos. Two other pedestals are described.—ST. A. KOUMANOUDIS, *Inscriptions of Athens, Amorgos, and Gytheion*. No. 1, a boundary-stone found at Ampelokepoi northeast of Athens, bears the inscription *Ἡερὸν: Διὸς: μιλichio: αἰς: Ἀθηναίαις*. The characters are in part those in use before Eukleides. The meaning of αἰς is unexplained. Zeus Meilichios appears to have been a god publicly accepted in Athens, not merely worshipped by private persons, as Foucart (*Bull. de corr. hellén.*, 1883, p. 506 ff.) has supposed. No. 2, *Ἡερο . . . Ἀλοπ . . .* in two lines on a fragmentary stèle was found near the Akropolis. No. 3 is a fragmentary account of some building: the broken slab containing the inscription was found in Athens. No. 4, an Attic inscription of the fourth century B. C. (the place of its

discovery is unknown) records a decree in honor of some men who had shown courage against the enemy: about half of the inscription is wanting. For similar records, see *Bull. de corr. hellén.*, vol. XIII, p. 257 ff.; Έφημ. Ἀρχ., 1883, p. 134; 1884, p. 135; 1887, p. 187. No. 5, a fragmentary Attic decree in honor of an Epidamnian and an Apolloniate: it was found in excavations near the Λεωφόρος Ὀλγας. No. 6, a fragmentary inscription of the third century B. C., records the dedication of *phiaitai* to Athena by slaves or metics who have escaped prosecution. Similar inscriptions are CIA, II, 2, No. 776, 768, *Addenda*, 776^b. No. 7, Δ]ιὸς [κ]αταβάτων, is inscribed on a base or altar, in two lines, in characters of the pre-Christian Roman times. No. 8, Ἰταλικὸς ξενίῳ Ἀσκληπιῷ, on a base of Pentelic marble, was found near the Olympieion, as were also Nos. 7 and 9. No. 9, inscribed on a cubic block, shows that a statue of Hadrian was set up by the senate and people of the Koropisseans, the metropolis of the Kistai: a note concerning coins of Koropissos is added by I. N. Sboronos. No. 10, an inscription from Amorgos, contains provisions regarding a loan made, apparently by the city, to individuals: the inscription is very fragmentary. No. 11, . . . λιος Λαμπᾶς Ἡλείο(ς) Ἀσκληπιῷ ἐπικύω εὐχὴν, is inscribed upon a small altar found at Gytheion.—I. N. SBORONOS, *Analecta Numismatica* (pls. 1, 2; five cuts). Pl. 1 gives 25 coins of Byzantion; pl. 2 gives 27 coins of various places and two engraved gems. The headings of the article are as follows: "The care (θεραπεία) of Eurypylos." "Keressa the mother of Byzas." "Io." "Poseidon." "Byzas." "Monument of Boidion the hetaira." "The trophies in the Melion of Byzantion: Altar of Athena Skedasios or Ekbasios." "The so-called *Kypoi* of Byzantion: Statue of Artemis Lampadephoros." "Coins of the Byzantians and of Rhoimetalkos." "The raving Daphne (Δάφνη μαινομένη) of the Kalchedonians." "Some other coins of the Byzantians (golden horn, obelisk, Strategos Leon, etc.)." "Coins of the Paionian Laiaians." "The Euxine Sea." "Perseus and Andromeda (copy of a wall-painting)." "The Homeric poems in relation to the types of coins." "Numismatic types as pendants (dancing nymphs, Apollon and Artemis, Kapaneus and Pyle)." "River and Sea." "Philippoupolis Trimontium." "Herakles and Echidna or Hydra." "Herakles and a sea-deity (ἐνάλιος δαίμων)." "Epigraphy of the coins of the Byzantians." "The word βασιλεύουσα as epithet of cities." The published coins are described and discussed in detail in connection with other monuments and ancient writers.—D. PHILIOS, *Archaic Heads from Eleusis* (pls. 3, 4, 5, 6). Three heads are published. The first has been placed upon a torso in the Central Museum in Athens. The statue represents a female. The thick hair, which shows remains of red color, is arranged in close curls about the forehead, and, with the exception of two locks behind

each ear, falls in one broad mass behind; a stephane confines the hair, passing over the top of the head from ear to ear; behind each ear is a hole for attaching something. The work is ascribed to the end of the sixth or the beginning of the fifth century B. C. The second head resembles that from the Akropolis published in *Εφημ. Ἀρχ.*, 1883, pl. 6; *Jahrbuch*, 1887, pl. 13. The hair is so arranged that no locks fall over the breast. This head belongs to the same period as the first. It has been injured by fire. The third head is assigned to the middle of the sixth century B. C. It is compared with that in the Rampin collection (Rayet, *Monuments de l'art antique*, pl. 18). The person represented is a boy or youth. The hair is arranged in cork-screw curls all about the head, and is confined by a band about the crown. This head has been somewhat injured and defaced. A fourth head is described, much smaller than the others ($\frac{1}{2}$ life size), and like them belonging to the period of ripe archaism. This head also has suffered from fire.—CHR. TSOUNTAS, *Investigations in Lakoniké and the Tomb of Bapheion* (pls. 7, 8, 9, 10; cut). In March, 1889, the writer was sent by the archæological society to excavate the tomb at Bapheion (Vaphio) and at the same time to make investigations in the neighborhood in search of other remains of the same early period. On the site of Therapnai, near the temple of Menelaos, fragments of Mykenian vases were found, but excavations led to no results. Near Amyklai were discovered two tombs dug in the earth, like those of Spata and Nauplia. On the hill called Paleopyrgos, a little south of the tomb of Bapheion, fragments of Mykenian pottery and a few stone utensils were found. A bee-hive tomb (τάφος θολωτός), like that of Menidi was opened at Arkina (or Arkinai) in the Taygetos Mts., near Arna, about six hours southwest of Sparta. The length of the *dromos* is 2.65 m., the depth of the *stomion* 2.80 m., its width about 0.78 m., its height 1.16 to 1.30 m.; the *tholos* is 4.70 m. in diameter, and the walls are preserved to a height of about 3.75 m. For about 0.55 or 0.60 m., the building is cylindrical, and above this the walls converge in the usual way. The stones are small and unhewn. Ashes were not found in the tomb; bones and teeth were found. Besides these, the tomb contained five white stone heads, a polished elliptical stone without carving, a gold ornament similar to that in Menidi (*Kuppelgr. v. Men.*, pl. 5. 10), a copper nail, and fragments of pottery without ornament. The opinion is expressed that the names Arkina and Arna are ancient. Arna occurs also in Boiotia and Thessaly. The ancient inhabitants of Arkina and the neighborhood were probably Minyans. The tomb at Bapheion has attracted the attention of many travellers. The *dromos* looks toward the east, and is 29.80 m. in length. Its width is 3.45 m. before the *stomion*, 3.18 m. at a distance of 23.10 m. from the *stomion*, the point where the right wall ceases. In the *dromos* were found traces of

coals, two leaves of gold, a fragment of electrum, and many fragments of pottery, partly unadorned, partly adorned with figures of the Mykenaian epoch. The *stomion* is ill preserved; the lintel has fallen, and the stones which formed it have been broken up and removed. The lower width of the *stomion* is 1.93 m.; its depth at the bottom, 4.56 m.; its sides are of large hewn stones. Extending across the *stomion* is a pit 1.60 to 1.80 m. wide and 1.90 m. deep. At the bottom of this pit was a layer of ashes, but nothing further was found in it except earth and rubbish. The *tholos* is 10.15 to 10.35 m. in diameter; its floor is uneven, covered with earth mixed with ashes, and charred bones were found scattered about, as were also various objects of gold, silver, copper, and stone. To the right of the centre is a pit or grave 2.25 m. long, 1.10 m. wide, and 1 m. deep: the sides are formed by small slabs placed horizontally upon each other, the top and bottom by larger slabs. Bones were not found in the grave, nor were ashes or charcoal. Various objects were found here. Plates 7 and 8 represent numerous ornaments and utensils of various metals; plate 10 represents forty engraved stones (*Inselsteine*), most of which were found in the grave, though many objects of various kinds, including Mykenaian pottery, were found on the floor of the *tholos*. Plate 9 represents, in gilt, the most striking objects found in the grave. These are two golden cups with figures in *repoussé*. [For a description of these cups, see *News*, pp. 371-2]. Besides the cups, other objects represented on the plates are described in detail.—D. PHILIOS, *Excavation of Ancient Tombs at Eleusis* (6 cuts). In the *Πρακτικά τῆς Ἀρχ. Ἐταιρ.*, 1884, pp. 83-7, the writer reported the discovery of very ancient tombs in a field on the southern slope of the hill of the akropolis at Eleusis (report here copied). Several of these tombs have been excavated and are here described. They are rectangular and of proper size for the reception of human bodies. In these graves were found human remains with charred wood. In some, the bodies appear to have been burned, in others not. In one grave the corpse seems to have been laid not straight nor upon its back, but upon its side with bent legs. Remains, mainly skulls, of children were found in jars of Mykenaian style. Some other archaic vases were found, and also some objects of metal. Another tomb was excavated underneath an ancient wall. In this were unburnt bones and pottery almost all of Mykenaian style, though some pieces approach the "geometric" style. Bee-hive tombs have not been found at Eleusis.—I. N. SBORONOS, *Supplements to the Book "Numismatique de la Crète Ancienne"* (pls. 11, 12, 13). Sixty-nine Cretan coins are published and described. These the writer had been unable to incorporate into the first part of his book. They represent the coinage of Anopolis, Apollonia, Aptera, Arkadia, Arsinoë, Achaïa, Chersonesos, Knosos, Kydonia, Eleuthernai, Eranos (or Ertai or Erythraia),

Eltyna, Gortyna, Hierapytna, Hyrtakina, Itanos, Lappa, Lisos and Hyrtakina, Lyttos, Olous, Orion, Phaistos, Phalasarna, Polichna, Polyrenion, Praisos, Rhaukos, Rhithymna, Sybrita, Tylisos, Thenai (?), and, from Roman times, Trajan, Hadrian, and Antoninus Pius.

HAROLD N. FOWLER.

JAHRBUCH D. K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. Vol. IV. No. 4. 1889.—F. HAUSER, *Marble Throne from Solunto* (8 cuts). Fragments of a leg of a throne and of a footstool are published and discussed. The leg was described by Serradifalco (*Antichità di Sicilia*, v, pl. 39, *cenni sugli avanzi dell'antica Solunto*, pl. 4) and Semper (*Stil*, i², p. 413) as part of a candelabrum. The fragments are richly adorned. Where the crossbars joined the leg are reliefs representing (1) an armed warrior crowned by a Niké, while at his other side stands a figure like Venus Genetrix, and (2) three draped female figures. The footstool rested upon lion-paws above which are lion-heads. The front and sides of the footstool were carved in relief. The four dancing Nikai on the throne of Zeus at Olympia occupied the position held by the frieze on the throne-leg from Solunto.—H. HEYDEMANN, *Homeric Representations on Vases* (pl. 10; 2 cuts). The front painting of a krater (*vaso a colonnette*) from Vulci is published (coll. Jatta, No. 412, *Catal. Jatta*, p. 152 f.). The vase belongs to the period of the Diadochoi. The back was adorned with three draped youths. On the front a richly-draped seated female figure is represented. She holds a child on her knees. Before her stands a long-haired warrior. He has on high laced boots, and about his loins an apron-like girdle. In his left hand he holds a shield and two spears. With his right hand he holds his crested helmet toward the child who is trying to reach it. Behind the seated figure stands a young warrior dressed in a chiton and high laced boots. He is taking off his sword, having already laid aside his shield and pilos. This is only a genre-scene, but the artist was under the influence of the Homeric description of Hektor's parting from Andromache. The same remark applies to the vase in the British Museum No. 418 (*Journ. Hell. Studies*, ix, 3, p. 11 f.). Monuments with representations of the Homeric scene are mentioned. The front painting of a second krater of about the same period, also from Vulci (*vaso a colonnette*, *Catal. Jatta*, p. 984 f, No. 1709, back adorned with three draped youths) is published. In the middle stands a long-haired warrior with spear and shield. He wears a scarf which passes over his left shoulder and is confined at the waist by a belt, leaving the ends free. He is about to kill an enemy who kneels before him (at the right). Behind the central figure (at the left) is a man bound to a tree. The scene represented is the rage of Achilles after the death of Patroklos, and the artist ap-

pears to have been influenced by the Homeric description of the death of Lykaon. A similar representation is found on a vase, the present fate of which is unknown, published by Passeri, *Pict. Etr.*, 256. The chief painting of a black-figured hydria from Etruria (*Bull. dell' Inst.*, 1843, p. 75 f. = *Arch. Ztg.*, 1843, p. 141; Overbeck, *Sagenkreis*, p. 466, 133) is published. A chariot is represented, to which two horses are harnessed. These are held by a bearded man in a long garment, while two nude men are bringing two more horses. A bearded, bald-headed man is mounting the chariot. Behind him stands a bearded man in Phrygian costume. The inscription seems to read Πάρις καλός. The scene may refer only in a general way to the Trojan war, or it may represent Priam about to depart to ransom Hektor.—G. TREU, *Arrangement of the Eastern Pediment of the Temple of Zeus at Olympia* (pls. 8, 9; plan; 20 cuts). All previous discussions of this subject are considered, including that of J. Six (*Journ. Hell. Stud.*, x, 1889, p. 98 ff.), which is treated in an appendix. The arrangement previously proposed by the writer is retained without change except that the female figures of the central group change places, the one which was formerly called Hippodameia being now called Sterope and vice versa, and that, behind the horses, chariots of appropriate size are introduced. The introduction of chariots brings the figures toward the corners nearer to each other. The interchange of the female figures is adopted from Studniczka. The arguments urged in opposition to this arrangement are answered by an elaborate discussion of the circumstances and positions in which the fragments were found, and the writer's conclusions are supported by careful examination and measurements of the fragments themselves. In spite of the fact that the seated and crouching figures of this pediment are mere genre-figures, the corner figures are still regarded as representations of Kladeos and Alpheios. So the name Kephisos is retained for the corresponding figure in the pediment of the Parthenon. The pediment of Olympia is discussed in its relation to those of the Parthenon and of the temple at Aigina, and is declared to stand nearer to that of Aigina.—ARCHÄOLOGISCHER ANZEIGER (*Supplement to the Jahrbuch*). REPORT OF THE MEETING OF GERMAN PHILOLOGISTS AND SCHOOLMEN at Görlitz, Oct. 1-5. There, O. Richter spoke of the care with which archaeological interests are regarded in the present changes in Rome; R. Förster spoke on the date of the Laokoön group, which he considers Hellenistic; A. Conze, on the archaeological institute and the gymnasia; R. Becker, on portraits of Livy; O. Rossbach, on the Temple of Diana at Nemi; A. Conze, on the Elgin collection at Broom Hall; K. Wernicke, on Greek fables relating to bulls; R. Engelmann, on the vase-painting *Mon. dell' Inst.*, xi, pl. 33; R. Förster, on various representations of the Laokoön; Th. Schreiber, on the gods of Alexandria; H. L. Ulrichs, on a

marble torso of Herakles and the hydra (Plin., xxxiv. 59); *O. Richter*, on the Capitoline plan of Rome; *M. Mayer*, on the relations of Greek-heathen and Christian dragon-slayers.—REPORTS OF MEETINGS OF THE ARCHÆOL. SOCIETY IN BERLIN, 1889. FEBRUARY. *Willeken*, on the Hellenistic Portraits found in Egypt; *Curtius*, on the Chalkotheke on the Akropolis; *Assmann*, on the date of the large relief of the Palazzo Spada; *Grüttner*, on technical peculiarities of the art of Praxiteles.—MARCH. *Robert*, on a vase-painting representing Theseus with Poseidon at the bottom of the sea (in the last number of *Museo Italiano*), adding a discussion of various mythologic questions; *Trendelenburg*, on the figure of a youth in a representation of the same scene on a sarcophagus; *Curtius* (and *Graef*) on the palaistra at Olympia; *Herrmann*, on the temples of Kypros; *Conze*, on a Roman sepulchral relief in Bukarest, with remarks by *Robert* and *Furtwängler*; a report was read from *C. Humann*, on a sarcophagus in Pergamon.—APRIL. *Puchstein*, on the gods in the Pergamene gigantomachia; *G. Hirschfeld*, on the second volume of the *Lykische Reisen*, and on the development of the Ionic alphabet; *Furtwängler*, on *Montelius, Civilization of Sweden in Heathen Times and Bronsaldern in Egypten*, on *Löschke, Aus der Unterwelt*, on *Hoffmann, Apollo Kitharödos*, on the statue of a boy from the Akropolis and another statue of a boy in Rome, on a *Hermes* statue in Florence, and on the *Eubouleus* head of *Praxiteles*; *Böhlau*, on the hero *Butes* and the *François vase*.—MAY. *Kern*, on the vases of the Theban *Kabirion*; *Willeken*, on Greek ostraka-literature from Egypt; *Curtius*, on the topography of Olympia; *Wernicke*, on several vase-paintings; *Conze*, on a painting in *Schwerin*.—JUNE. *Wernicke*, on inscriptions from the Akropolis; *Robert*, on *Gorytos* of *Nikopolis*, with remarks upon ancient painting and sculpture.—JULY. *Dörpfeld*, on the latest excavations on the Akropolis; *Furtwängler*, on *Flinders Petrie, Naukratis, part II*; *Lehfeld*, on the literature concerning the Roman monument at *Schweinschied*.—NOVEMBER. A letter from *Willeken* on two fragments of papyrus found by *Flinders Petrie* near *Hawara*. The text is published with remarks. The fragments belong apparently to a description not of *Sicily*, as *Sayce* (in *Flinders Petrie, Hawara, Biahmu and Arsinoe*, p. 28) thinks, but of *Attika*; *Treu*, on the Eastern Pediment at Olympia (remarks by *Curtius*); an article of terracotta from the Roman *Viminacium* was declared by *Graef* and *Engelmann* to be part of a tile-roof.—ACQUISITIONS OF THE MUSEUMS OF ANTIQUITIES IN GERMANY. III. *Dresden* (contin.). 60 cuts. 35 Greek terracottas, 200 terracottas and 8 terracotta heads from *Tarentum*, 53 votive-offerings to gods of healing, 14 other terracottas from *Italy*, 52 utensils, lamps, etc., of terracotta, besides a great number of fragments, all adorned with relief, 18 painted vases of various styles, 9 objects (rings,

etc.) of gold and silver, a large number of seals and gems (nearly 100), 8 votive figures and 3 other objects of tin and lead, 13 objects of carved bone besides pins and fragments, objects from a grave in the Vigna Ribultano (9 numbers described in *Bull. dell' Inst.*, 1882, p. 242 ff.).—iv. *Stuttgart*. *Royal Collection of Antiquities*. Round stone table from Bissingen, fragment of mosaic from Rottenburg, a number of gilded bronze letters from near Gmünd, the collection of Colonel v. Wundt consisting of about 400 objects comprising small bronzes, vases, terracottas and small works in marble. This collection is to be divided between the royal collection at Stuttgart and the archaeological cabinet of the university of Tübingen. The genuineness of some of the objects is doubtful.—v. *Hanover*. The Kestner Museum was opened Nov. 9, 1889. Most of the objects in the museum were collected by August Kestner, who lived in Rome from 1817 until 1853. They consist of (1) Egyptian stelai, sepulchral figures, vases, bronzes, scarabaei, utensils, etc., and a part of a papyrus *Book of the dead*, (2) Greek and Etruscan vases (50 *bucchero* vases and a number of Greek painted vases), besides a great number of Roman vases, (3) terracottas (a number of "Campana-reliefs," about 20 statuettes, and some tiles, etc.), (4) over 300 lamps, (5) a number of bronzes, (6) gold ornaments, rings, etc., (7) Tesseræ described by Henzen, *Mon. dell. Inst.*, iv, 1848, pls. 52, 53, (8) coins, Greek from Sicily and Lower Italy, Roman from the earliest to Byzantine times, (9) about 1000 cut stones and 600 "pasten."—vi. *Cassel*. 28 vases, chiefly aryballoi, and two fragments of a breastplate (2 cuts).—vii. *The Collections of Antiquities in Western Germany*. *Metz*. Marble bust of the so-called dying Alexander, a counterfeit inscription by Boissard. *Mannheim*. Part of a so-called altar of four gods from near Heidelberg. *Homburg*. 3 iron utensils. *Wiesbaden*. 4 doll's utensils of clay from Cologne, a glass goblet with high foot and chickens of terracotta from Maifeld. *Speyer*. Roman remains at Bliesdalheim and Kreimbach have been excavated. The museum has acquired two equestrian statues of sandstone from Breitfurt, a bronze wagon-pole-head from Eisenberg. *Worms*. Roman graves and buildings have been excavated. The museum has acquired: an altar of four gods, a sculptured drum of a column, a serpent's body, a bearded head with a garland, a sword and sheath, a lamp, several amber objects, some ancient silver spoons, a silver pin and silver ring. *Mainz*. 36 graves have been opened in which 68 glasses and some gold beads were found. Two gravestones have reliefs and inscriptions. The museum has further acquired two iron tools, a bronze fish-tail, a statuette of a dwarf, a few terracotta ex-votos. *Trier*. Roman buildings and mosaics have been laid bare. Acquisitions: six inscriptions, three reliefs, a bronze Apollo statuette, a bronze pedestal with inscription. *Cologne*. 3 inscriptions.—REPORT FROM THE VON

WAGNER'SCHEN KUNSTINSTITUT OF THE UNIVERSITY WÜRZBURG (by *H. L. Ulrichs*). The relief *Mon. and Ann. dell' Inst.*, 1856, p. 29, pl. 5 (Overbeck, *Kunstmyth. Atlas*, pl. 1, No. 48) has disappeared: a cast of it exists in Würzburg, and is here described and discussed.—From NORTH-EERN FRANCE (*M. Mayer*). The Panckoucke collection of vases is now in Boulogne-sur-Mer. The catalogue contains 419 numbers but does not entirely agree with the collection in its present condition. Many of the vases are here briefly described.—NEWS OF THE INSTITUTE.—NOTES TO THE PUBLICATIONS OF THE INSTITUTE. *E. Fabricius* discusses the market building at Alinda with reference to Trémaux, *Exploration archéologique en Asie Mineure* (cut); *F. Hauser* discusses the position of the so-called "Narcisso;" *H. Heydemann* discusses the bull of Tiryns in connection with a similar representation on a gem in his collection (cut). The man above the bull is not a *daemon* but the driver of the bull awkwardly represented.—BIBLIOGRAPHY.—INDEX. HAROLD N. FOWLER.

JOURNAL ASIATIQUE. Feb.-March. 1890.—E. SÉNART, *Notes on Indian Epigraphy*. III. *Some Indo-Bactrian monuments*. All the monuments here noticed come from the region of the Yuzufzais on the north bank of the river of Kabul, belong to the same period, are interrelated, and are now all in the museum of Lahore. There are three inscriptions, in Indo-Bactrian characters, very valuable for this obscure branch of Indian Epigraphy. No. 2 alone is inedited; the others have been imperfectly published. No. 1 is called the inscription of *Takht-i-Bahi*: cf. *Journ. Roy. As. Soc.*, new ser. v, p. 376 *sqq.*, and *Archæol. Survey*, vol. III, p. 58. It contains a votive formula, and is dated from the year 26 of the reign of King Gudupharas, the year 103 of the continuous era. This, according to the general acceptation, would place this inscription in the first century A. D. No. 2 is also a votive inscription of less length dated in the year 68 of the era. No. 3 is of extremely difficult interpretation. B. *Statues of Sikri*. Excavations conducted by Captain Deane at Sikri, near the famous ruins of Takht-i-Bahi and Jamalgarhi, brought to light some Græco-Buddhic sculptures of extreme interest, to which attention has already been called in this Journal (pp. 179, 331). The phototype plates of two of them, here given, are sufficient to indicate the general style of them all. The religious buildings discovered are like those of Jamalgarhi. The statue of Buddha was placed in one of the niches arranged within the encircling walls. The other statues were placed in like manner or on the platforms. The statues illustrated are carved in a schistous stone of dark-blue color: that of Buddha is 2 ft. 8½ ins. high, the other is 3 ft. ½ in. high. Both are in good condition. Buddha is seated cross-legged, in a meditative attitude, with a large nimbus, and the *árná* between his eyes. But it is Buddha before the *bodhi*,

in a terrible condition of emaciation and weakness, the bones, muscles and veins standing out in high relief. The basrelief on the base shows western influence more distinctly; it represents fire-worship, and the small figures are quite in the usual style of Græco-Buddhic reliefs. Western influence is still more evident in the second figure, which is difficult to identify. It is a standing female figure carrying three children, one on each shoulder and a third, supported by her right arm, to which she is giving suck. The headdress and the crown encircling it have a classic aspect, though the rest of the attire is Indian. The influence exercised on India by Hellenic art as early as the time of the Seleucidae and the Greek kingdom of Bactriana is shown by the coinage. But only at Amrāvati is classic influence shown so clearly as to be universally granted. The art of the Northwest shows its western origin in many ways, and even the iconography of Buddha as it appears at Amrāvati betrays this origin. These Amrāvati works date apparently from the second century A. D., and are the latest that show this classic influence. The statues of Sikri are considerably earlier. They may be connected with the inscriptions mentioned above, two of which appear to date from the first century A. D. It is with the names of Goudophares and Kanishka that one is inclined to connect these sculptures. In this connection, it is suggested that their types may have an Iranian origin, spread by the Parthian dynasty. The final conclusion is, that we know of two phases of classic influence upon India, (1) one partial and indirect, of which the Sikri sculptures are examples; (2) later, one stronger and direct, exemplified at Amrāvati.—JAMES DARMESTER, *The great inscription of Kandahar*. This is an important contribution to the knowledge of the Mussulman epigraphy of Afghanistan. The part of the citadel at Kandahar where the inscriptions are placed is thus described by Dr. Bellevue in 1857: "On a rock, between two crumbling towers, is a stairway of forty steps that leads to a rock-chamber; at its entrance, to the right and left, is a life-size crouching leopard. The whole is cut in the calcareous rock and is said to have occupied seventy men nine years. The chamber is bow-shaped and dome-roofed. . . . Its inner walls are covered with inscriptions cut in relief of fine work and said to have occupied the artist four years." In reality, the inscribed matter consists of a number of independent inscriptions. The first part dates from the Great Mogul Sultan Bābar and relates how, on Sept. 6, 1522, the emperor Bābar took Kandahar, and, the same year, ordered to be carved in this rock a monument to commemorate this conquest: this was executed in five years under the direction of the prince royal Kāmran, governor of Kandahar, and was finished in 1526-27. The taking of Kandahar formed the turning point in Bābar's romantic career, and consequently in the history of India, as it made possible the foundation of the Empire of the Great Mogul. The

second part of the inscription dates from the time after Bâbar's death, when one of his four sons, Mirza Askari, was governor of Kandahar, in the years between 937-9. Then the inscription changes character. It skips over seventy years into the reign of the Emperor Akbar and the years 1556-1605: it is not official but the work of a courtier, the object being to indicate the vicissitudes of Kandahar from Bâbar to Akbar, to enumerate the provinces in Akbar's dominions, and to make a personal puff. The composer thereof, Mir Maçûm, is known as a poet and historian and as a skilled composer of inscriptions.

A. L. F., JR.

MITTHEILUNGEN D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XIV. No. 3. 1889.—E. REISCH, *The Drawings of Ciriacus in the Codex Barberini of Giuliano di San Gallo*. The drawings in this codex are all by Giuliano, only the titles being by his son Francesco. All the drawings of Greek monuments are copied from Ciriacus except the ground-plan on fol. 32, which is an arbitrary reconstruction of some building. The drawings of Ciriacus represent: one of the Atlantes of the so-called porch of the giants (fol. 27); St. Sophia; a Nereid floating above the water; two stelai with Corinthian capitals, one of which has the inscription *CIG*, 587; the Parthenon (Laborde, *Athènes* I, p. 32), and the portal of Hadrian's aqueduct; ruins of Pleuron, Kalydon, Nikopolis, Argos Amphiloichikon, Azylea, Delphi, Lebadeia, and Eretria (fol. 28); three architraves with the inscription *CIG*, 1298, which rest upon two Corinthian columns, while the drawing of the statue on the monument of Thrasyllus is inserted in the gate-like building thus formed; the Olympieion with eleven columns; the choregic inscription of Thrasyllus; the monument of Philopappos; the "tower of the winds;" the lion now before the arsenal in Venice; the ruins of two round towers of squared stones; a wall with two towers and a gate; a chair; a number of architectural fragments; part of an aqueduct; further walls and fragments (fol. 29). Many of these are without any hint of their *provenance*, others have titles showing that they are from Athens, the Peiraieus, and other places.—H. G. LOLLING, *The Sanctuary of Artemis near Antikyra* (pl. 7). Pausanias (x. 37. 1) mentions a sanctuary of Artemis to the right of Antikyra. This is found on a peninsula on the northern side of Mt. Kephali. The vertical side of the rock is smoothed in the form of a temple-front about 8.50 met. wide. Niches in the wall were for votive offerings. This seems to have constituted the primitive sanctuary, though at some time a building (part of the foundations of which is preserved) was built out from the rock. The sanctuary had a peribolos. Two fragmentary inscriptions are given, upon one of which is the name Artemis.—E. PETERSEN, *Protection against Birds*. On the upper side of projecting parts of the metopes of

Olympia are holes which have been explained as serving to aid in the adjustment of the figures. These are now explained as the holes in which metal forks were fastened to keep birds away from the sculptures. A fork of this kind is still in place on a tile from Caere, and other Italian tiles show traces of this kind of protection. Passages in the *Ion* of Euripides show that care was taken to keep birds away from the sculptured adornment of temples.—C. CICHORIUS, *Inscriptions from Asia Minor*. 40 inscriptions are published. 13 are from Bithynia, 9 from Mysia, 18 from Lesbos, (14 from Mytilene, 4 from Eresos). The inscriptions are sepulchral and dedicatory, including also fragments of decrees and (from Lesbos) a fragmentary list of names. All are of comparatively late date.—P. WOLTERS, *Mykenian Vases from northern Greece* (pls. 8–11). Pre-Hellenic graves near Volo in the form of chambers about 2 m. square and 1.50 m. high, with stone walls and ceilings, are described. Vases from these graves are published and described. They belong to the Mykenian style. A vase is described which belongs to a different class, resembling the vases with geometric adornment found near the *Tumba* of Dimini. Similar graves near Antikyra in Phokis are described. Perhaps these graves mark the site of the ancient Medeon (Pausanias, x. 36. 6). Mykenian vases are said to have been found in these tombs.—J. STRYGOWSKI, *The Akropolis in Early Byzantine times* (9 cuts). The Parthenon was probably transformed into a Christian church about 435 A. D., dedicated probably to St. Sophia. In the tenth century the church was dedicated to the Virgin, possibly because it contained the portrait said to be the work of St. Luke. The portrait may have been placed there when the bishop took possession of the Akropolis, which may have been in 662 when Constans II visited Athens. By "Early Byzantine" times the period is meant which centres about the time of Justinian, and ends apparently with the time of the iconoclasts. The forms of architectural members are in the fourth century entirely antique, Corinthian and composite capitals in the Roman manner. In the fifth century variations are frequent. Between the capital and the archivolt a block (*Kapitellkämpfer*) is inserted which seems to be a remnant of the ancient architrave. The acanthus leaves begin to take a thick form with incised edges (*fett und zackig*). Capitals of these forms from Ravenna, Constantinople, and elsewhere are discussed. On the Akropolis, in the Stoa of Hadrian, in Prevesa, Chalkis, Argos, Akrokorinthos and elsewhere in Greece, capitals and architectural ornaments are found which show that Greece took part in the development of Byzantine architecture. It appears, however, that Christian buildings on the Akropolis were not begun before Theodosius II.—G. TREU, *On the Eastern Pediment at Olympia* (cut). B. Graef (*Mitht.*, XIII, 402) says that the head assigned by Treu to the kneeling girl (o) belongs to the kneeling boy

(*B*), that assigned to the kneeling boy (*B*) to the kneeling man (*C*), and the head from a metope (*Ausgr.*, iv, pl. 11) is a male head and belongs to Herakles. All these assertions are combated, and a correction of Treu's previous views concerning the fastening of the head of the kneeling boy is made.—G. TREU, *On the Gravestone of Metrodoros from Chios*. Studniczka (*Mith.*, XIII, 160) thinks that the roughened front of this stone was not painted. The opinion is here advanced that it was adorned with a colored painting of the deceased. Comparison with a late Thessalian relief in Berlin (Coll. Sabouroff, vignette in text to pl. 38) supports this opinion.—W. DÖRPFELD, *Chalkothek and Ergane-temple*. The s. w. part of the Akropolis is divided into three terraces. It has been generally supposed that a temple of Athena Ergane stood on the middle terrace. It is here shown that neither inscriptions nor Paus., i. 24. 3 prove the existence of such a temple. The middle terrace was divided from the precinct of Artemis Brauronia by a portico which faced the west and offered a solid wall to the middle terrace. A broad flight of steps connected the middle terrace with that upon which the Parthenon stands. The southern part of the middle terrace was occupied by a building about 41 met. long (from east to west) and 15 met. deep. The back of this building was built against the southern wall of the Akropolis. In front of the building was a portico 3.5 met. deep. Only foundations of this building have been found. This building cannot have been a temple on account of its shape and dimensions. Of all the ruins on the Akropolis, this agrees best with what is known of the Chalkothek. The existence of the Chalkothek at this point shows that there was no temple of Ergane.—MISCELLANIES. J. H. MOEDTMANN, *Addenda to Vol. XII*, p. 168 ff. Notes and corrections on a series of inscriptions from Asia.—A. E. KONTOLEON, *An unpublished Inscription of Kolophon*. The inscription (on a jar) reads Ἐπὶ Λεωφάντου Λάμπρον, ἄθλον ἐν Λαμφάκων.—A. E. KONTOLEON, *Inscription of Magnesia on the Maiandros*. The inscription published in the Ἀρμυρία No. 1677 and *Bull. de corr. hellén.*, XII, p. 328 is republished. It records a decree in honor of Tiberius Claudius Tyrannus.—B. GRAEF, *The Painting of the Nike of Archermos* (cut). On the left-side of this figure are traces of ornamentation which make it not improbable that the clothing of the whole upper part of the body was covered with a pattern of circles and semicircles.—P. WOLTERS, *Inscription from the Dionysiac Theatre* (facsimile). Fragments of an inscription found in 1886 supplement *CIA*, III, 1, p. 86, 316, 317. The entire inscription reads Ἱερὰς Ἑστίας ἐπ' Ἀκροπόλει καὶ Λαβίας καὶ Ἰουλίας, with the name Φαλείων written above. The cult of Hestia on the Akropolis is new. The priestess of Hestia seems to have had charge of the worship of Livia and Julia.—LITERATURE.—DISCOVERIES (see *News*).

No. 4.—A. SCHNEIDER, *Vase of Xenokles and Kleisophos* (pls. 13, 14; two cuts). The excavations carried on by the German Institute in the Dionysiac theatre in February and March of 1889 brought to light a variety of terracottas, bronzes, etc., but the chief importance belongs to fragments of pottery. These belong to various styles, Mykenian, orientizing, Corinthian, black-figured and red-figured. Some fragments of Panathenaic *amphorae* and of flat vases in the manner of Tleson were found. The red-figured technique is represented by about 25 fragments, all as early as 450 B. C. Youthful figures after the manner of the circle of Epiktetos are represented, along with various ornaments. One fragment has the head of a river-god to whom a cup is offered. The most important vase is an *oenochoe* with trefoil opening. Almost the entire vase is preserved, though much broken. On the front of the vase seven more or less naked men are engaged in a drunken carouse about a krater. The inscription reads Χσενοκλέες: Κλέσοφος and, separated from these names as well as from each other, the words ἐποίσαν and ἔγραψαν. The thirteen known vases of Xenokles are all *tazze* (*schalen*), some with mere inscriptions, others adorned with figures of youths riding on horseback or *hippalektryon*, rows of animals, sirens and mythological persons. All this is in marked opposition to the representation on this new vase. The free style of the new vase is also very different from that of Xenokles as hitherto known. This vase belongs to the last creations of the black-figured style, and shows that alongside of the earliest red-figured vases there existed black-figured vases painted in a free and spirited manner. The painting of this vase must be attributed rather to Klesophos than to Xenokles.—AD. MICHAELIS, *The Date of the Rebuilding of the Temple of Polias in Athens* (cut). In 1888 a new fragment of the account of expenses for rebuilding this temple was found (*Mith.*, 1888, p. 229 ff.; *Δελτίον*, 1888, p. 87 ff.; *Berl. phil. Woch.*, 1888, p. 1257 f.). This fragment mentions blocks of the tympana and other portions of the upper part and roof of the building, showing that it was approaching completion. In connection with the earlier fragments, this part of the account makes it probable that the building was finished in the summer of 408 B. C. In the earliest fragment of the account, various blocks are mentioned as partly finished and ready to be put in place. This shows that the work of building had been suddenly interrupted. The most probable date for this interruption is 413 B. C., when Dekeleia was fortified and the Sicilian expedition came to a disastrous close. The work was taken up again in 409. It must have been begun some time before 413, probably in the years of comparative quiet after the peace of Nikias. The balustrade of the temple of Athena Niké is assigned to the same period, about 420.—W. JUDEICH, *Olympos*. Nine new inscriptions are published, which the writer in com-

pany with F. Winter found in the summer of 1887 an hour and a half north of the ancient Mylasa. The inscriptions are cut in blocks which seem to have belonged to a building of Hellenistic times: about 100 B. C. Nos. 1-2 are records of purchase and lease, the contracting parties being the representatives of the city-divinities Apollo and Artemis on the one hand and private citizens on the other. These inscriptions belong with LeBas-Wadd., Nos. 326, 327. Nos. 3-4 are of similar character. Nos. 5-6, also of similar character, belong with LeBas-Wadd., Nos. 331, 332. Nos. 7-8 also are parts of psephismata relating to purchase and lease, but the characters used show that they do not belong together. No. 9 is a fragment of a similar psephisma. The inscriptions LeBas-Wadd., Nos. 326, 327, 331, 332, 339 are republished with corrections.—A. BRÜCKNER, *An Equestrian Monument from the Peloponnesian War* (pl. 12, cut). A relief from Eleusis is published. The inscription reads—σ' Ἐπιζήλο ιπ. αρχε, which is completed: Πυθόδωρος Ἐπιζήλο(ν) ἱππαρχέ[σας τοῖν θεοῖν. This Pythodorus is identified with the commander of the Athenian fleet in 414/13, the *choregos* of 415, and the oligarch of 412, probably also with the Πυθόδωρος Ἀλαϊεύς who was *ταμίας τῆς θεοῦ* in 418/17. The exact date of the occurrence which led to the dedication of this relief is left undetermined. The fragment now extant is broken off at both sides. Two rows of figures are represented, one above the other, divided by a curved ridge which is supposed to represent uneven ground. In both rows cavalry coming from the right are overcoming infantry fleeing toward the left. The figures were made with great care and originally parts of the armor and trappings were of bronze. An arrangement of figures in two rows, one above the other, with all the Athenians on one side and all their opponents on the other, is proposed also for the relief in honor of the cavalry slain at Corinth, the inscribed *akroterion* of which is in the National Museum at Athens (Kabbadias, *Καταλ. τοῦ Κεντρ. Μουσείου*, N. 163 a; *CIA*, II, 3, 1673; Hicks, *Greek histor. Inscr.*, No. 68).—**MISCELLANIES.** H. SCHLIEMANN, *Inscriptions from Ilion*. Two inscriptions. The first is a fragment of a decree (apparently honorary) of Hellenistic times, the second reads *Μητρόβιος Μητροβίου*.—N. NOVOSADSKY, *Supplement to CIA*, I, 1. A new fragment of this inscription, which still, however, remains fragmentary. It now appears that, in the first half of the fifth century B. C., those who were initiated to the lesser Eleusinian mysteries paid the hierophant one obol each.—A. S. DIAMANTARAS, *Ancient Sepulchral Inscription in Myra of Lycia*. This inscription provides that besides Synergos of Myra only Anthousa of Arnea shall be laid in the inscribed tomb. If any one else be buried therein he shall pay to the people three *kitharephoroi* (coins stamped with a lyre).—**DISCOVERIES.—REPORTS.**

HAROLD N. FOWLER.

PROCEEDINGS OF THE SOCIETY OF BIBLICAL ARCHÆOLOGY.

1890. January.—ROBERT BROWN, JR., *Remarks on the Tablet of the Thirty Stars*. 1. The Tablet *WAI*, v, 46, No. 1, written in the Babylonian cuneiform, is of great interest in connection with archaic astronomy and stellar mythology. It is divided into three parts. *Part I* (lines 1–38), including the obverse and the first two lines of the reverse, is in two columns, the first of which gives the names of thirty stars, and the second gives their regent divinities. *Part II* (lines 39–53) also is divided into two columns, the first of which gives a further star-list, and the second adds some remarks and explanations. At the head of this second star-list stand *Sakvisa* (Mercury), *Dilbat* (Venus), *Lubat* (Jupiter), and *Nibatanu* (Mars). *Part III* (lines 54–64) consists of text, not in columns but in two divisions. According to Diodoros, the Babylonian heaven was divided into three parts: (1) a central portion, roughly corresponding with the ecliptic, in which moved sun, moon, and the five planets, and under the orbit of these they say that thirty stars, which they denominate “divinities of the council” have been marshalled. These are the thirty stars of this tablet. (2) A northern portion, occupied by twelve stars called by Diodoros “dicasts;” and (3) a southern portion, also occupied by twelve stars similarly named: and they say that the chiefs of the divinities [of the council] are twelve in number, to each of whom they assign a month and one of the twelve signs of the Zodiac. Here, the writer remarks, we see a combination and harmonization of two distinct systems, solar and lunar, and also, apparently, Shemitic and Sumero-Akkadian. The sphere of the thirty stars was equivalent to that of the twelve signs, and the former concept was rather Sumero-Akkadian, the latter, Shemitic. In a combination of the two divisions and systems, twelve of the thirty necessarily became chiefs. The stars named in the list in Part II of the tablet are not placed in uranographic order, but the Thirty Stars appear to be, at least approximately. This is their order. 1. The Star of the Foundation—the god Sar. xxx. The Star Makhar, i. e., the Star of the He-goat-fish—the god Nebo and the god Urmetum. xxix. The Star of the Proclamation of the Sea. By means of the constellation of the Goat-Fish [= Capricornus], with its adjoining stars of the *Sea*, the *Fish*, and the *Foundation*, we are enabled to determine the beginning and the end of the Thirty Stars, and we further observe that this beginning indicates a year commencing at the winter solstice.

February.—E. DE BUNSEN, *The Pharaohs of Moses according to Hebrew and Egyptian Chronology*. This is an attempt to prove that Ahmes, the founder of the XVIII dynasty, was the Pharaoh of the oppression, and Amenophis I the Pharaoh of the Exodus, and that, consequently, Moses lived about 250 years earlier than hitherto supposed. M. Bunsen's chrono-

logy is: B. C. 4620, Possible accession of Menes. 2360, The Flood. 1993, Emigration of Hebrews under Abraham from Haran to Egypt, and commencement of their bondage. 1593, Expulsion of the Hyksos from Egypt, and end of Hebrew servitude. 1563, Exodus of the Hebrews under Moses, etc.—A. L. LEWIS, *Some suggestions respecting the Exodus*. This summarizes the different opinions as to the date and Pharaohs of the Exodus, beside the generally received one of Rameses II and Menephtah. The opinions quoted are those of Mr. Cooper, who favors Tahutmes II as the king, and 1515 as the date, of the Exodus; of Mr. Burnett, who fixes upon Apachnas and the year 1665; of Mr. Schwartz, who selects Tahutmes III and 1438 B. C.; and, finally, of M. de Bunsen, with Amenhotep I and 1563 B. C. The writer's own conjecture is then given, namely, that the Exodus took place at the end of the reign of Horemhebi or Ramesu I and that Amenhotep IV was the oppressor.—ROBERT BROWN, JR., *Remarks on the Tablet of the Thirty Stars*. Part II. II. The Star of the Hyaena—the god Anu. III. The Star of the Scimitar—the weapon of the hand of Merodach. IV. The Star of the Great Twins. V. The Star of the Little Twins—the goddess Sidu and the goddess Nin-Sar [= Istar]. VI. The Star of the King—Merodach. VII. The Star the River of waters—the Fire-god, the prince. VIII. The Star of the Crossing dog—the goddess Nana. IX. The Star Yoke of the Enclosure of Anu, prince of the heaven, great. X. The Star Son of the Supreme temple—the divine Judge. XI. The Star Wood-of-light, that shines before Bel-the-Confronter. XII. The Star Fire-flame, time of the House of the East. XIII. The Star of the god Kua, time of the House of the East. XIV. The Star the Colossus, the burning of fire of the goddess Bahu. XV. The Star Lady of heaven [Nin-Sar], and the god of the Great City. Nergal and the Double-one of Evening [= Istar] = *Virgo*. XVI. The Star of the Hero, the god Sky-furrow—Anu. XVII. The Star of the Animal from the East. The god Rimmon is terrible [or the great Storm-bird] = *Corvus*. XVIII. The Star of the Stag—Ursa Major. XIX. The Star Man of fire, and the god Latarak—the Moon and Nergal. XX. The Star the Lady, Might of Babylon (Tintirki) = *Spica*. XXI. The Star of the Tip of the Tail—the god the creator: in *Libra* [at the end of the great serpent's tail]. XXII. The Star the Tree, Light of the hero, weapon of Ea, which in the midst of the abyss he placed. The falchion, the weapon of the hand of Merodach. XXIII. The Star the Hero, the king—the Lord of seed; (in) the month Tisri the Lusty King [Lugal-tudda]. XXIV. The Star Man-of-death; the corpse, the fever. XXV. The Star of the snake—the goddess Queen of the Great Region [Nin-ki-gal]—Nebo and the king (Merodach)—the god Samas and the god Raman. XXVI. The Star of the Scorpion—the goddess Iskhara of the Sea [= Istar]. The director of Fire [Sar-ur] and the Director of Sacrifice [Sar-gas].

xxvii. The Star Beast of death, the god Kush, god of the Great Country [= *Lupus*]. xxviii. The Star of Anunit and the Star of Sinuntu. The commentary on the text is extremely ingenious.—C. J. BALL, *The new Accadian*.

March.—J. H. GLADSTONE, *Copper and Bronze of Ancient Egypt and Assyria*. A summary of this paper is given in JOURNAL, v, p. 157.—G. MASPERO, *The meaning of the words Nouit and Hail, etc.*—C. J. BALL, *The new Accadian*.
A. L. F., JR.

REVUE ARCHÉOLOGIQUE. 1889. July–August.—M. DELOCHE, *Study on some seals and rings of the Merovingian period* (contin.). LXXX. Engagement or marriage ring of Marcus and Nivia. This is a gold ring found on the grounds of the ancient collegiate church at Angers. It has two bezils, one inscribed MARCO, the other NIVIA. It may be dated from the middle of the VII century. LXXXI. Seal-ring of Antoninus. This is a gold ring found at Craon (Mayenne). On the bezil is engraved a bust, and around this the inscription ANTONINOS. LXXXII. Seal-ring found at Martigné-Briant (Marne-et-Loire). This is a silver ring found in 1870, with monogram which is read ALMARETVS or AMALRETVS. LXXXIII. Seal-ring from the excavations in Ralliement Place at Angers. This is a bronze ring with monogram which is read + MARIOSE. LXXXIV. Seal-ring of Junianus. This inedited bronze ring was found at Saint-Pierre-du-Lac (Marne-et-Loire). The monogram is read IVNIANVS. LXXXV. Seal-ring of Abto. This gold ring is in the Cabinet des Medailles of the Bibliothèque nationale. On the bezil is inscribed a bird and the name ABTO. LXXXVI. Inedited seal-ring in the Cabinet des Medailles. This is a gold ring with monogram which is read GLANICE S(ignum). LXXXVII. Seal-ring found near Travecy (Aisne). This is a bronze ring found between Travecy and Vendeuil, with monogram which is read + GELOSIMI. LXXXVIII. Seal-ring of Una. This is a bronze ring found at Charnay (Saône-et-Loire) with monogram which is read S(ignum) VNE.—V. J. VAILLANT, *Roman glass from Boulogne-sur-Mer* (pl. xiv, xv). From June 1888–March 1889, there was discovered a large quantity of Gallo-Roman glass at Boulogne. Objects of various kinds were represented; amongst them three pieces of extraordinary character. One is a vase, its body representing a *Janus bifrons*, above which is a spreading conical receptacle. A second vase is in the form of a woman, from its extraordinary features apparently a caricature. The third vase is in the form of a bird.—PH. BERGER, *Ceramic Inscriptions from the Carthaginian necropolis at Hadrumetum*. The Carthaginian necropolis at Soussa in Tunisia, the site of the ancient Hadrumetum, has furnished more than twenty inscriptions. The arrangement of the tombs is quite uniform.

They are excavated from the tufa in groups, are oriented, and in general contain merely urns filled with human bones, and a quantity of smaller vases. The inscriptions are in cursive characters and painted upon the urns. Three are published here; one of them is rendered: "[urn] for the bones of Abdmelquart, counsellor, citizen of Sidon, [servant] of Abdmelquart. Sillec erected this to him, having been appointed over . . . for ever."

—E. DROUIN, *The Era of Yazdegerd and the Persian calendar* (contin.). The important facts for the Persian period are the following: adoption by the Persians of the Avestan calendar about 450 B. C.; borrowing of the *epagomenes* from Egypt about the same time; introduction of the Persian calendar into Kappadokia and Armenia about the year 400; borrowing, from the Chaldeans, of the 13th intercalary month in 309. This completely reorganized calendar was used through the Sassanian period.—P. MONCEAUX and V. LALOUX, *Restoration of the Pediments at Olympia* (plates XVI–XXI). This article is an extract from the work of MM. Monceaux and Laloux, *Restauration d'Olympie*, a book which contains some attractive illustrations, but is otherwise of little scientific interest.—J. A. BLANCHET, *Ancient theatrical and other Tessarae* (contin.). Tessarae of various classes are here treated. Some contain representations of buildings or parts of buildings, others seem to have been used for athletic games and races. Those which contain both Latin and Greek numerals are then considered.—S. REINACH, *Chronique d'Orient*. The sixty pages under this title are almost entirely devoted to classical archaeology. Amongst the most important sections of this interesting summary are the notices of antiquities transported to the Central Museum at Athens, and of archaeological news from Eleusis, Ikaria, Mykenai, Epidauros, Delphi, Chios, Delos, Kypros, Phrygia, Tell-el-Amarna, and Arsinoë. Most of these items are included in the *News* of the JOURNAL.—BUHOT DE KERSERS, *Monumental Statistics of the department of the Cher*. This is a concise statement of the architectural peculiarities of the monuments of the xv and xvi centuries found in this district.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—*Proceedings of the National Society of Antiquaries of France*.—*Archæological News and Correspondence*.—BIBLIOGRAPHY. A review (by L. LEGER) is here given of J. TOLSTOI and N. KONDAKOV, *Les antiquités russes dans les monuments de l'art* (1st fascicule).—SUPPLEMENT. R. CAGNAT, *Review of Epigraphic Publications relating to Roman Antiquity*.

September-October.—J. DE MORGAN, *Note on the use of the Assyrian system of weights in Armenian Russia in prehistoric times*. In the prehistoric tombs near Gok-tchai were found numerous bronze bracelets and unornamented rings, which appear to have been not jewelry but money. This opinion seems confirmed by the discovery in a tomb at Akthala of

8 heavy bronze rings at the feet of the body. Together, the rings weighed 4 kilog. 520 grammes. That a man should have worn rings weighing 2 kilog. 260 grammes on each ankle seems incredible. A careful study of the weights of these rings shows a close correspondence with the Assyrian *shekel*, at least as far as 24 multiples of the unit. Other rings from the Caucasus, now at the museum at St-Germain, exhibit the same correspondences. The other rings and objects which might have been employed as weights discovered in other parts of Europe and now at St-Germain do not exhibit any such correspondence with the Assyrian *shekel*.—P. DU CHATELLIER, *The Treasure of St.-Pabu*. Outside the town of St.-Pabu, in the canton of Ploudalmézeau (Finistère) there were discovered, in February 1889, ten or eleven thousand Roman coins dating from 260–360 A. D., and a silver cup, patera, and vase. In the neighboring village of Lanrivoaré were discovered two gold bracelets of Gallic type, and further west at Pont-l'Abbé several hundred Roman bronze coins. The coins were probably destined to be the pay of Roman soldiers stationed in this district and buried before their defeat.—C. MAUSS, *Note on the sketch of the plan of the Mosque of Omar, published in June–July 1888*. Supposing that the diameter of the outer circle of the Mosque of Omar was 100 units or feet, we find the value of the foot to be $= 0^m 3658^{mm}$, from which we derive the cubit $= 0^m 543^{mm}$, which indicates the use of the Ptolemaic system. In the Middle Ages, this unit of measure was called the foot of Christ.—P. BERGER, *Ceramic Inscriptions from the Carthaginian nekropolis at Hadrumetum* (contin. and end). Eighteen inscriptions from vases are here published. They are in cursive characters, and illustrate the transitional stage from the Carthaginian to the Neo-Carthaginian alphabet. This places them in the second century B. C., or in the early first century. They show that from the beginning of Roman domination, perhaps earlier, cremation was practised at least in some centres of Carthaginian influence.—E. DROUIN, *The Era of Yazdegerd and the Persian calendar* (contin. and end). After presenting the conclusions already reached, the question is raised, whether the Persians had two current and parallel years which coincided only once in 1440 years. This is decided in the negative. The foundation of the era of Yazdegerd, the reforms of Yazdegerd and Djelâl-eddin, and the Parsee calendar are then considered.—J. A. BLANCHET, *Ancient theatrical and other Tesserae* (contin. and end). A continuation of the catalogue of tesserae with Greek numerals, to which are added those with Latin numerals, tesserae with only numerals, and those with only figured types or with inscriptions only.—M. R. DE LA BLANCHÈRE, *Provincial Art in Roman Africa*. As there were many dialects of the Latin language, so there are corresponding varieties of provincial Roman art. Africa furnishes an excellent field for

studies of this character. We find there abundant instances of an art semi-Roman semi-Carthaginian in character. Especially as we turn from public monuments and from the cities to the industrial arts and to the country, the un-Romanized characteristics become evident.—G. BAPST, *The Tomb of Saint Quentin*. St. Quentin was the first saint whose remains were exhumed in order that a more dignified monument might be made by St. Éloi. The caskets which may have contained his remains have disappeared, but it is certain that the sarcophagus in the crypt of the collegiate church of St. Quentin is not the tomb made by St. Éloi, which was adorned with gold, silver and precious stones.—A. BAUX, *Note on Sardinian workmanship in copper*. The object of this paper is to show, from the investigations made by the late Léon Gouin, that Sardinian copper instruments did not result from artificial fusion of bronze, but were founded from native copper, the mines of which must have been more extensive in antiquity than they are at the present day.—**MISCELLANIES.** *Monthly Bulletin of the Academy of Inscriptions.—Archæological News and Correspondence.—BIBLIOGRAPHY.* Reviews of J. DE BAYE, *Études archéologiques. Époque des invasions barbares; industrie anglo-saxonne*; PAUL LACOMBE, *La Famille dans la société romaine*; S. REINACH, *Description raisonnée du musée de Saint-Germain-en-Laye*, vol. I; E. CARTAILHAC, *La France pré-historique d'après les sépultures et les monuments*.

November-December.—M. DELOCHE, *Study on some seals and rings of the Merovingian period* (contin.). LXXXIX. Seal-ring of Paulina. This was found at Angers. It is a gold ring, two millimetres thick, with an opening of 15^{mm}. The bezil is inscribed PAVLINA. xc. Seal-ring of Basina. This is a silver ring found, in 1882, at Gamiolle, province of Namur. The monogram is deciphered as SI(gnum) BASINE. The name Basina is well known in Merovingian chronicles. xci. Another seal-ring with the monogram Basina. This is a bronze ring found also in the province of Namur, but in a warrior's tomb. xcii. Seal-ring of Cona. A gold ring now at Bonn, found doubtless in the Rhine region. The monogram is read S(ignum) CONANE. xciii. Seal-ring of Ailla. Bronze ring at the museum of Namur, inscribed AILL, read AILLA. xciv. Ring inscribed with an equal-armed cross, at the angles of which are four points. xcv. Ring with a monogram, found at a place called the Wood of the Sorcerers, province of Namur. xcvi. Seal-ring with the letter S with cross-bar. xcvii. Seal-ring with the letter A repeated. xcvi. Ring with the initial N repeated. xcix. Ring with the three crucifixion nails. The six rings last mentioned are in the museum at Namur.—J. MÉNANT, *The Cylinder of Urkham in the British Museum* (pl. xxii). This cylinder, formerly in the possession of Dr. John Hine, and published, from the drawing of Rich, by Grotefend and by Ker-Porter, is now in the Koyoundjik

gallery of the British Museum. From the unique character of the royal throne, as well as from its general spirit and technical execution, Ménant considers it a copy and not an archaic original.—A. H. SAYCE, *The cuneiform tablets of Tel-el-Amarna* (translated by S. Reinach). During the winter of 1887–88, were discovered the important series of cuneiform tablets from Tel-el-Amarna in Upper Egypt. These are now in the museums of Bülák, Berlin, and the British Museum. They reveal to us that, in the xv century B. C., there existed active literary relations between Babylonia, Egypt, the small states of Palestine, Syria, Mesopotamia and even eastern Kappadokia. The medium of communication was the cuneiform language of Babylonia. It follows from this, that in all the civilized Orient of this period there existed libraries and schools where the Babylonian language and literature were taught—Babylonian was then the language of diplomacy, as French in modern times. The present paper deals only with the tablets at Bülák, which are specially important for the relationship between Egypt and Palestine. They suggest the question, Why should not the mounds of Palestine be explored in search of similar treasures?—R. MOWAT, *Inscriptions from the territory of the Lingones preserved at Dijon and at Langres*. It is generally admitted that the limits of the diocese of Langres, before its dismemberment for the formation of the diocese of Dijon, corresponded to the territory of the Gallo-Roman Lingones. Seven figured but uninscribed monuments and fifteen inscriptions from this territory (now at the museum at Dijon) are here published (to be contin.).—CHAMONARD and CONNE, *Catalogue of Greek and Italo-Greek painted vases in the collection of M. Bellon*. Preface by MAX. COLLIGNON. This catalogue is the description of a portion of the collection of M. Bellon of Rouen, which was selected by M. Collignon to exemplify the history of the art, and was exhibited at the Exposition of 1889 (to be contin.). Forty vases are here described.—H. LECHAT, *Marble head in the Akropolis Museum at Athens* (pl. XXIII). This is a Pentelic marble female head, found on the Akropolis in 1888. It is the only one of these archaic heads which wears the *polos*, and hence may be called an Aphrodite. In style it may be associated with the heads published on plates XIII and XIV of the *Musées d'Athènes*, and dated from the early years of the v century.—E. MÜNTZ, *Pope Urban V. An Essay on the history of the arts at Avignon in the xiv century* (pl. XXIV). The object of this paper is to make known, by the aid of inedited documents from the Vatican, some of the expenditures in the interest of art, and the names of the artists employed by Pope Urban V. It may serve as a complement to the papers already published on the tomb of Urban V in the *Gazette Archéologique* (1884, pp. 98–104) and in the *Gazette des Beaux-Arts*, (Nov., 1887).—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—*Archæological News and Corres-*

pondence.—**BIBLIOGRAPHY.** Reviews of RAYET, *Études d'archéologie et d'art* (by M. HOLLEAUX); *Œuvres complètes de Mg^r X. Barbier de Montault*. Tomes I and II (by E. MÜNTZ); MÜNTZ, *Guide de l'École Nationale de Beaux-Arts*.—**SUPPLEMENT.** R. CAGNAT, *Review of Epigraphic Publications relating to Roman Antiquity*.
ALLAN MARQUAND.

REVUE DES ÉTUDES GRECQUES. 1889. July-Sept.—S. REINACH, *Apollon Opaon at Kypros*. On a column found by Cesnola at Palaio-Paphos is a dedication ΟΠΑΟΝΙ ΜΕΛΑΝΘΙΩ. A similar dedication is engraved on a stelé published by Colonna-Ceccaldi. Mr. Hogarth, in excavating in 1888 at Amargetti=Paphos, found ten vases of ex-votos with a similar dedication, Ὀπάωνι Μελανθίω; while on a statuette he read Ἀπόλωνι Μελανθίω. A note regarding the latter find is given in the JOURNAL (IV, p. 349), and a summary of this paper by Reinach, as read before the *Académie des Inscr.*, will be found in the JOURNAL (V, pp. 373-4). According to the inscriptions, Opaon=Apollon, as an epithet turned into a proper name. Opaon as the shepherd reminds of Aristæas, the Arcadian Apollon (Nomios), who is sometimes called the son of Apollon. The surname Ὀπάων as applied to Apollon is also of Arcadian origin, and the well-known relations between Kypros and Arkadia authorize this transmission. Melanthios may be the name of the eponymous hero of the Attic deme of Μελαννὰ or of the ancient Arcadian city of that name, transferred by emigration to Kypros and then identified, as a second name, with Apollon=Opaon.—G. SCHLUMBERGER, *Inedited Byzantine Seals*. Without waiting for the issue of the supplement to his *Sigillographie byzantine* published in 1884, the writer here describes and illustrates a number of important inedited Byzantine leaden seals, impressions of which have been sent him, among many others, since that year. Among them are the seals of "Gregorios Kamateros, Imperial praetor of the Peloponnesos and Hellas" (1073-1118); of "Theognios, turmarch of Hellas" (VIII-IX cent.); of "Dargde-Kavos, archon of Hellas" (VIII-IX cent.); of "Paulos, abbot of Daphne" (X cent.); of "Theodoros, bishop of Aigina" (IX cent.); of "Johannes, metropolitan of Thebes" (X-XI cent.), a magnificent work; of "Nikolaos, hypatos and chartulary of Kephallenia" (VIII-IX cent.), very rare; of "Arkadios, protospatharios and strategos of the Bosphoros" (X-XI cent.), the most interesting of all, for it is the first-known that bears the name of the Bosphoros; of "Niketas, epoptes, imperial notary of the West and slave of our mighty and holy emperor" (period of the Angeli), an extremely rare seal as there are but two others of *epoptes* or imperial inspectors of the provincial administration; of "Polydoros, regionary" (rare, of VI-VII cent.); of "Georgios Saponopoulos," a superb seal of the X or

XI century.—ARCHÆOLOGIC BULLETIN.—EPIGRAPHIC BULLETIN.—BIBLIOGRAPHY.

Oct.-Dec.—*Inedited letter of Böckh to Raoul-Rochette.* This letter treats of wall-painting among the ancients, in view of the famous controversy on the subject between Letronne and Raoul-Rochette. R.-Rochette considered that the early works were all portable paintings on wood, and that wall-paintings with historic subjects arose only with the decadence: Letronne everywhere saw paintings executed directly on the walls. On the main issue, Böckh agrees with R.-Rochette.—CHRONIQUE, etc.

1890. Jan.-March.—S. REINACH, *Inedited inscriptions copied in Asia Minor and Syria by Capt. Callier (1830-34).* The long sojourn of Capt. Callier in the East, in connection with M. Michaud, resulted in his bringing back an immense mass of archæologic material, which he, however, never found time to publish. After his death, in 1889, his widow turned over his papers to M. Reinach, who here gives the result of an examination of his copies of inscriptions. Most of those which he took have been since published by other travellers, but a number are inedited, the originals probably having since perished or been used as building-material. These are (1) from Alia, of 192 A. D., a stelé in which the town places itself under the protection of the god Mén (= Askenios); a metric inscription; (2) from Flaviopolis=Temenothyrai, an inscription on the base of a statue raised by the city of Amorion in Phrygia to an archon of Temenothyrai, in connection with which M. Reinach discusses the question of the site of the latter city, and whether it is at Oushak, where this inscription was found; and he concludes in favor of this identification. The number of inscriptions given by Reinach is seventy-five. A. L. F., JR.

RIVISTA ITALIANA DI NUMISMATICA. 1890. No. 1.—F. GNECCHI, *Notes on Roman Numismatics.* A unique Antoninianus of Zenobia is here published. Then follows a chapter on countersigns impressed by a punch on coins of the Republic and early Empire. There are two classes: *countermarks*, consisting of letters that stand for certain words, and *countersigns*, consisting of simple conventional signs. The former class—comparatively easy to understand and more apparent, while they are, at the same time, not numerous—have been carefully studied. The *countersigns*, however, have been neglected; they are much less visible, far more numerous, and very difficult to explain. They appear almost entirely on gold and silver coins. Bahrfeldt, Engel, Taillebois, and Milani have made slight contributions to the subject within narrow limits, but it has never been treated on a broad basis. In the tables annexed to this article, some 600 countersigns or groups of countersigns are given, slightly larger than their natural size. The greater part (481) are found on coins of the

writer's own collection, the rest (117), on coins in the Brera collection at Milano. As a necessary complement, and for the identification of the signs, there is a list indicating the identity and family of the coin, the name of the coiner, the date, and the position of the sign, whether on the obverse or reverse. The weight and condition, being useless, are not given. The writer believes that the signs were not punched officially by the State, but were the work of private individuals. He rejects Professor Milani's opinion, that they indicated, some a diminution, some an increase, of the normal weight, and were added by bankers. The writer's conclusions are: (1) the silver coins with countersigns are all of good silver, with very few exceptions; (2) the countersigns exist not only on the *aurei* but on all silver coins, *denarii*, *victoriati*, *semivictoriati*, *quinarii*, and *sextertii*, including even the incused coins; (3) they are found, as a rule, on worn coins, and only exceptionally on those fresh from the mint; (4) the great majority are on the obverse; (5) the countersign is usually single, but there are sometimes two, three, four, five, six, and even more, on a single coin; (6) it is very difficult to find two countersigns that are alike; (7) very few represent any object, most of them being as it were cabalistic signs; (8) their date is from about 100 B. C. to about 200 A. D.; (9) there are but very few among gold coins, while the proportion of silver coins punched with them is about 10 per cent. The explanation proposed for the existence and use of countersigns is as follows. When, under Nero, the Roman *denarius* was much reduced in weight, the earlier coins increased in value, but on account of long use and deterioration it became the custom to guarantee them by a private mark involving the responsibility of the marker, a sign which often sufficed to carry them through many transactions, but which later had to be supplemented by a second, a third, or more. This would show that, in the time of Nero, a large part of the coinage in circulation belonged to the old Republican coinage. In other words, the countersigns serve by their greater or less frequency to give a sufficiently exact indication of the quality of the coins in circulation at the time of Nero.—TARQUINIO GENTILI, *The coins of the Roman pontiffs Leo VIII (considered antipope) and John XIII, from 963 to 972 A. D.* The writer enters into a long historical disquisition concerning these two popes, especially in regard to their relationship to the German Emperor Otho, by whose aid they were elected and maintained in office, and to whom they granted extensive civil authority in Rome itself. These historic facts have light thrown upon them by the coins attributed to these two popes, which differ radically from all other early papal coins. On the first the legend is LEONI PAP.—OTTO. The only possible interpretation of these coins in which the Pope's name is in the dative, and the Emperor's in the nominative, is that they were coined by order not of the Pope but of the

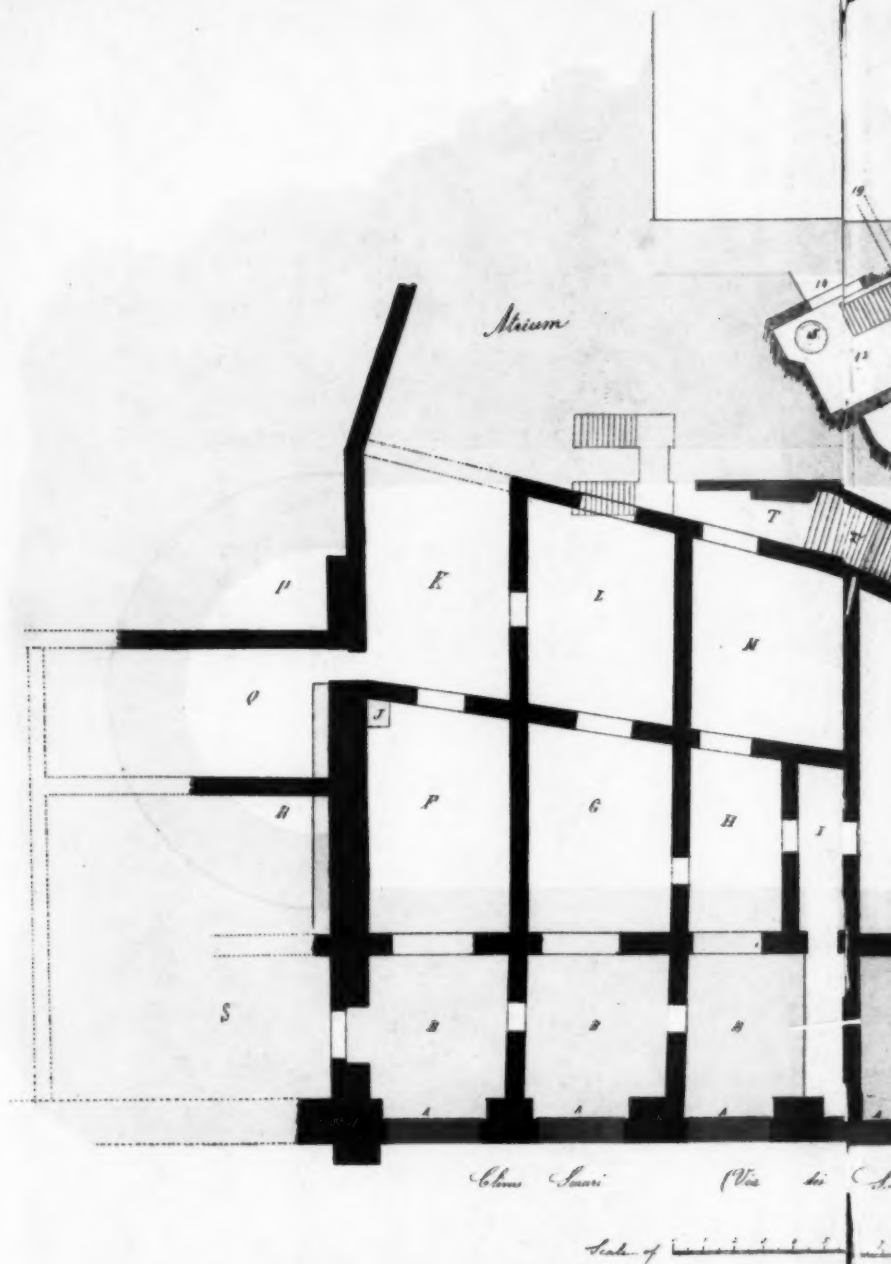
Emperor. This proves the extensive delegation of civil power to the Emperor. Details are given to show in what part of the years 964 and 965 the three different known coins of Leo VIII were coined. One of the coins of John XIII is of a type almost identical with two of Leo VIII, but his name appears in the nominative, as an affirmation of a change in the relations toward greater independence. In two other types of this Pope's coins the inscription is IOHANNES PAPA OTTONI IMPER., a sign that papal authority was strengthened but was desirous of conciliating and securing the support of the Emperor. The cross instead of the word *Roma* on the reverse is interpreted as a sign of the revindication of the Roman Empire by the Othos, it being the traditional emblem of Italian royalty on the coins of the Frankish kings coined in Italy.—S. AMBROSOLI, *An inedited patacchina of Savona of Filippo Maria Visconti*. Four times did Savona fall under the Milanese yoke. The second occasion was between 1421 and 1435 under Filippo Maria Visconti. Only two numismatic records of this period were known; a third is here published.—R. VON SCHNEIDER, *An anonymous Mantuan Medallist of the year 1506*. The writer—basing his opinions on an original drawing in the famous collection of the Belle Arti in Venezia, on which are two profile portraits recognized to be those of Emperor Maximilian I and his wife Bianca Maria of Milano, executed probably from portraits by Ambrogio de Predis—discusses a medal and a *testone*, coined both in gold and in silver. It bears the inscription *Maximilianu. Ro. Rex et Blanca M. coniuges*. All that is on the drawing is here reproduced, showing for what purpose it was made. It is known that the *testone* and medal are the work of a Mantuan die-cutter called in 1506 to Halle in the Tyrol, then the seat of the most important mint within the imperial territory. This artist is spoken of in many documents now in the archives of Innsbruck, showing him to have executed a great deal of work. His name has not yet been ascertained, nor have works of his for the Mantuan mint been identified as yet.

A. L. F., JR.

RIVISTA STORICA ITALIANA. 1890. Jan.-March.—E. CALLEGARI, *The inscription of Akraiphiai* (1-40).—M. Holleaux, of the French School at Athens, discovered at Akraiphiai in Boiotia the text of the official address pronounced by Nero at the Isthmian games in the plains of Corinth, by which he gave them nominal independence [this is spoken of in the JOURNAL, vols. IV, p. 491, V, p. 241]. The present writer takes this occasion to study the question: Whether Nero had any merit or influence as orator and poet. He inclines to the belief that Seneca was practically the writer not only of Nero's orations after his accession but also of those which he had previously delivered and which Tacitus mentions. Nero

was not a born orator. As a poet, especially as a broad satirist, his apparent popularity and many passages of ancient writers would show him to have possessed considerable power, were it not that this popularity did not last. Two great defects of his style were an affected strangeness and a multiplicity of learned citations, showing less poetic facility than erudition. But a study of Roman literature after Augustus shows that Nero was but an embodiment of the defects of his age. In regard to the address of Nero which forms the pretext for this paper, the writer points out its historic value, and recognizes it to be a genuine composition of the unaided emperor. He here shows the customary ability of the period to express in high-sounding and empty words sentiments which were not felt. The writer takes occasion to attack the moral attitude of Seneca, and to accuse him of insincerity, adulation and falsehood, a pitiful instance of the degradation of the century. The inscription of Akraiphiai adds nothing to our knowledge of Nero as a literary character.

A. L. F., JR.



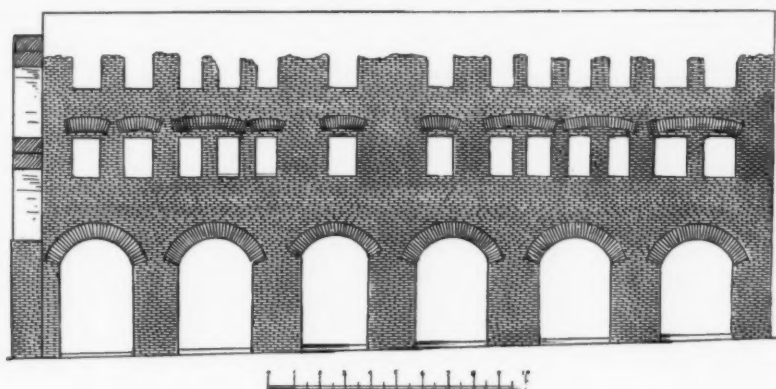
HOUSE OF THE MARTYRS JOHN AND PAUL



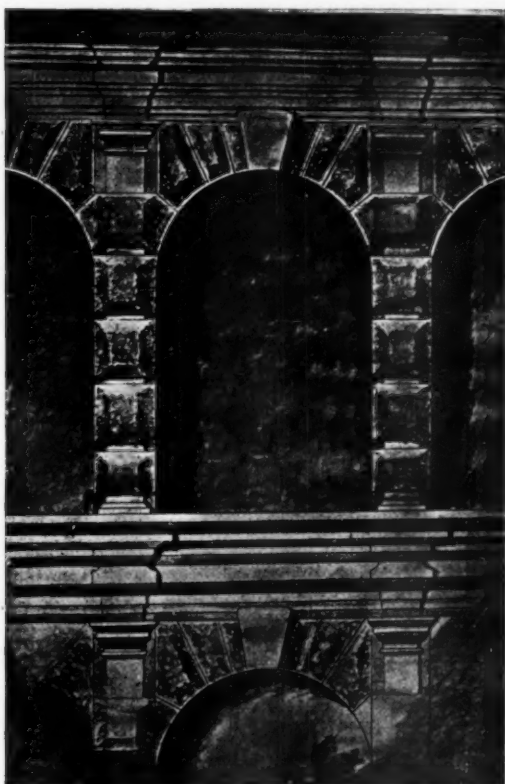
di S. L. Giovanni e Paolo)

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JOHN AND PAUL ON THE COELIAN.

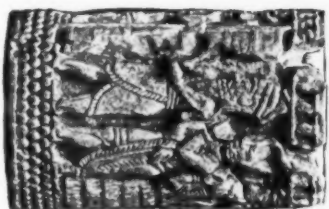


Facade of the house on the Clivus Scauri.



Roman Arches adjoining the Claudium.

HOUSE OF THE MARTYRS JOHN AND PAUL ON THE COELIAN HILL.



No. 1.—FOUR SECTIONS OF A CYLINDRICAL BABYLONIAN BASRELIEF FROM URTHIA, IN PERSIA.



No. 3.—*Merodach shooting Tamar.*



No. 2.—*Conflict of Merodach and Tamar.*



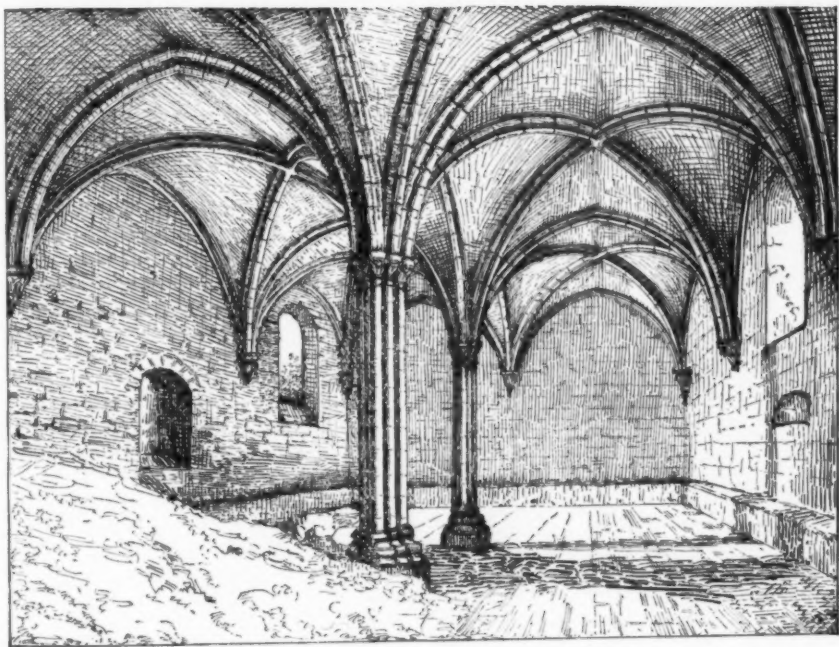
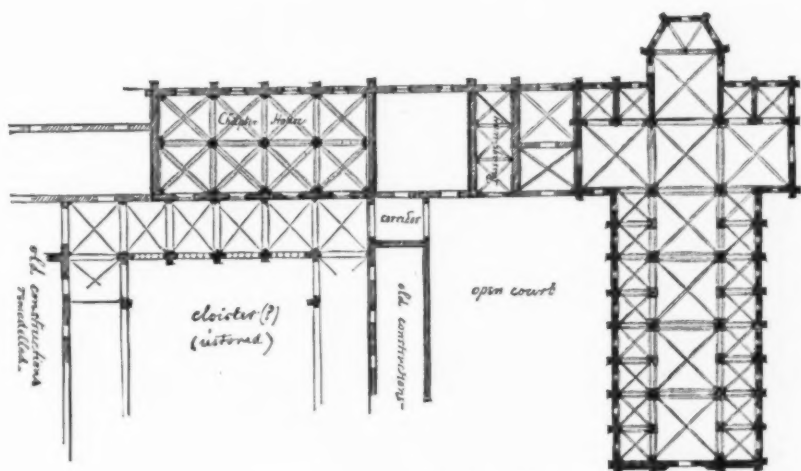
No. 4.—*Merodach and Zorpani.*

Nos. 2-4.—SEAL-CYLINDERS REPRESENTING BEL-MERODACH.

ORIENTAL ANTIQUITIES.



INTERIOR OF THE CHURCH OF THE CISTERCIAN MONASTERY OF SAN MARTINO AL TIVERNO NEAR VITERBO

*Interior of Chapter-House.**Ground-plan of Monastery and Church.*

MONASTERY OF SAN MARTINO AL CIMINO, NEAR VITERBO.



PORCH OF THE CHURCH OF SANT'ERASMO AT VERGELL.